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- Manuscripts should be between 3000 to 5000 words (including illustration, graphs, and charts)in ONE document created in Word format in which cover page must include author's name an abridged resume of the author, title of the article and the abstract with key words. The author page must not contain the name of the author.
- Submitted papers must be in English, original, and not previously published in any journal either in printed or in any other forms.
- Manuscripts should be submitted in "double spaced format" with wide margins, 200-300 word abstract, using 12 point font.
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Guest Editorial

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Editor, South Asian Journal for Business and Management Cases
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Concepts of globalization, international trade, liberalization are often bunched together when it comes to discussing their role in the contemporary world of business and the future scenario. International trade in simple terms conveys disposal of surplus produce to distant lands or finding better returns for your products and services, than what could be available from the neighbouring community or in an extended way to carry out imports and exports. International trade is not new; it has existed since civilization and long before land got divided into geographical boundaries to create nations. The trade took foundations: there are evidences of trade in times immemorial of merchants from the present day India, China, Egypt, Himalayan territories of Nepal, Afghanistan, Kazakhstan, Turkmenistan, Tibet taking long travel to sell their produce in far off lands. The first lessons of business management of what we learn in B-Schools today came naturally to our human genes .Man recognised early that he had to compete on cost and quality. The driving factor of time got added to the list soon thereafter as the man realized the importance of timely delivery to meet the needs of medicines arising from sickness, food from famines, luxuries from festivals and celebrations, and the departures of the caravans for journeys. It can be stated that competitiveness has always been a part of the human activity since very early days of human civilization when agriculture, hunting, fishing, mining were the early vocations. To produce more from the inputs or to get a better quality to demand a better barter or price were always the concerns. Man developed his own ingenuity. He would work for longer hours, create teams to finish work in shorter time, find ways to increase fertility of the land he tilled, use animal muscle power for several operations including preparing the land for sowing and transportation of the harvest. Design of tools for agriculture, fishing, and hunting played a significant role .The metal currency gave a big push to the concept as it provided a measure of economic performance. Competitiveness was developing as a science.

The human society entered a second stage of its civilization when it took up warfare as an organized vocation. Out of greed, compulsions to possess power through economic wealth, the sources of income, and to subjugat people and communities, often times on notions of making them civilized through own culture, religious beliefs and practices, and to convey a superiority complex of caste, creed, race and colour, man has waged wars and created empires thousands of miles away in distant lands. The British Empire, the French colonies, the capture of 'new lands' in Americas, Australia and New Zealand, the first and the second world wars are known examples at a larger canvass. The warfare has brought two more important lessons to the concepts of competitiveness in business management. You have to be winner to survive. The loser has no place. The winner is the one who has higher competitiveness to possess better arms, ammunition, the power of destruction, to carry out annihilation and a strategy to sustain the victory of possession. Better arms and ammunition are to possess better 'kill power', which comes from technology. The nuclear power won the second world war. Technology has emerged as a strong competitive factor. The second lesson to management discipline from the warfare came in the form of alliances, collaborations and integrations. The power of the allies in the second world and the NATO in the current scenario are well cited illustrations.

Warfare and the battles divided the landmass to create nations and therefore the natural wealth. These boundaries created barricades to the entry and exit of the produce to carry out international trade. A businessman had to pay an entry fee, 'the import duty' to make its products 'uncompetitive' to the land of entry. Restrictions were imposed on exports as these were termed as exploitation of the wealth of the nation. These restrictions varied from time to time and were dependent more on the specific national exigencies and less on ideologies. It became the perpetual dream for a business man to think of a paradise where there existed no restrictions to the imports and/or exports, unrestricted access to the resources, and the domestic and the foreign player had an equal playing field. The term globalization and related term of liberalization often used in this context of economic reforms or programmes of fiscal, structural adjustment, should be viewed in this context. Deepak Nayyar (2001) explains globalization as, 'It can be defined as a process associated with increasing economic openness, growing economic interdependence, and deepening economic integration between countries in the world economy'. There are assumptions: globalization deals with markets and producers; markets exclude consumers and buyers if they do not have income as purchasing power; producers and sellers are excluded if they do not have assets (excepting when they have capabilities). A surge towards

globalization, and liberalization came about in late 80's and early 90's, with collapse of the then communism, the only alternative to the economic order the world knew in The third world nations vied with each other in a race to open up its economy . The protagonists always advocated that opening of the economy would means one unified world with no wars on account of political differences and where economic interests and that would include prosperity for all, reduction of poverty, access to employment, restraint to inflation, choice for customers leading to high customer satisfaction would reign supreme. A number of reasons were cited: the role of the state getting minimised wherever possible; the market performs better (read efficiency) as compared to the state; maximised international economic welfare (Nayyer 2011).

Researchers cite different consequences of speeded up globalization and liberalization. Those committed ideologically to the process several advantages correlated to the basic desires of a human being free from slavery, liberty to carry out his vocation and fulfilment of his in built aspiration to be a master of his own show. It is also mentioned that success in entrepreneurship, innovation, creativity, discovery, pursuit of experimentation and carrying out research have a common human characteristics of low restrictions or controls. In the domain of business China is cited as a show piece. China with a diluted socialism that is more near to capitalism and a country that was miles behind India in technology, ownership of natural resources, managerial and organising capabilities and demonstrated high quality in many of the products especially in the sectors of textiles, leather goods, refining of metals, consumer durables, light electricals , bicycles till early 90's, and most shunned by the multinational corporates to invest , attracted the same multinationals in drones to make it the manufacturing hub of the world once it opted for the WTO regime. Worldwide China today leads in production of steel, cars, and is undisputed leader of consumables, artificial jewellery, toys, fans, blowers, room heaters and consumer durables. China without a single dissent is the undoubted super economic power of the coming decades. Interestingly this transformation happened because the country could get an access to the massive Indian market.

One glaring outcome of the process has been the opening up of a massive virgin market spread over vast tracts of Asia, Africa, Latin America to the multinationals who faced the prospects of drying up of population stagnant markets of the developed economies. Globalization not only brought in new markets but also access to natural resources, as well as permission to exploit in absence of any global or local regulations. Case studies have already started appearing in journals on exploitation of labour in the form of wages

below the level of subsistence, poor work conditions and unfair practices in employment in countries such as India, Bangladesh, Vietnam and more which were used for setting up plants or for outsourcing. Globalization has raised issues that concern, the use of finite resources, the warming of the climate because of massive use of energy to meet massive demand, to sustain the society because of the vacuum created by the weakening of the state, and the onslaught on the regional cultural issues.

Most papers included in this issue at a glance seem to cover diverse issues of management, but there is a common thread that binds them together . There is a common theme which runs through and that has roots concerning globalization practices. The issue has nine papers.

The opening paper from Rosanna Pittiglio, Filippo Reganati, and Edgardo Sica takes up the consequences of Italian domestic labour wages to go up because of the presence of multinationals to spread out on global basis. Theauthors point out that the increasing flows of FDI at worldwide level may affect local labour markets by improving pay and working conditions for domestic workers. The increase on wages has an obvious indirect impact on the economy. The paper aims at testing the impact of incoming FDI on local wages in the Italian manufacturing sector by using firm level data from 2002 to 2007.The findings suggest the presence of a non-linear relationship between gap size and wage spillover. From policy perspectives, the results can be used in identification of investment promotion on a selective basis.

Harold Andrew Patrick ,Bhaskar Raghu in the paper that follows point out that Today's Indian companies grow in a zone of rapidly changing road signs and technological advance. Companies need to produce goods and services efficiently and effectively. Indian companies have been conscious of the imperative needs of imposing least cost on the environment thereby reducing the carbon foot prints. India has been recognised as the globally for being one of the successful nations to have adopted IT mantra. The authors discuss factors that affect employees willingness to stay in Information Technology Industry.

With multiple players around and the volatility of business, globalization has ushered in more uncertainties of forecasting demand and supply. The companies have therefore to rely on analysis of its financial results. Financial statements provide information on a company's performance, stability and indication of future commercial and financial prospects. Analysis and interpretation of financial statements using various ratios and studies of trends do provide a shareholder, creditor, banker or potential investor valuable information about a company's financial status. Surendra Mahato in

his paper next presents some empirical results of predicting corporate failure by applying a multivariate technique to Nepalese companies to ascertain ability to discriminate failure and non-failure.

Developing a business strategy is fundamental to running a business in general and a globalized business in particular. Balanced score card (BSC) offers has a function as the interactive control system in the four classical strategies. Kazunori Ito and Masaki Iijima present next two aspects of BSC study at the General Hospital. The first study is how to cascade downward the strategy into business management in the hospital. The second one is to utilize BSC as an alternative to the daily management tool for nursing department. The authors point out that when the intended plan is unsuccessful, all managers should build the interactive control system for realizing emergent strategies.

The impetus to the growth of Special Economic Zones can be traced to consequences of globalization. China, and India, made a good start to set up Industrial zones or clusters much before globalization, to generate jobs, to create common infrastructure and to carry growth to the most under developed areas. Globalization saw the birth of massive Special Economic Zones first in China, to meet the challenges of globalization through highly attractive long term benefits to FDI's. John Walsh in the next paper presents an interesting case of two enemy states, the North and the South Korea jointly operating Kaesong Industrial Complex.

Bottled water is linked to globalization in several ways. Foremost the phenomenon got a big push when the habit to go for bottled water spread multifold and thus increasing its demand. The demand lead to concerns to save natural springs. Lastly, the industry became highly competitive to bring in practices of efficient supply chain. The second last paper in this issue from Dasanayaka SWSB, Sardana GD and Gayan Wedawatta is a classical study on Business Sustainability of Small and Medium Scale Enterprises on Bottled Water Industry in Sri Lanka. It voices various concerns that require interventions of the industry as well as the regulators.

The last paper of this issue is a conceptual paper on human resource management and globalization with proposed framework for future research authored by Dhruba Kumar Gautam. Realizing the facts that human resource is a key for the globalization, the paper highlights three perspectives of globalization that impact on human resource management and suggest its areas of research: evidence to changes in the global business environment; levels of effectiveness in implementing Strategic Human Resource Management practices; and human resource competencies relevant for

implementing such strategic HRM policies and practices. In developing country like Nepal, distinct competencies are important to human resources to foster the economic recovery that was worse at the time of internal political conflict. The paper of Gautam addressed these issues as a necessary step towards facing the challenges of globalization.

I do hope that the varied, but related to a common theme, scholarly readings provided by the papers will evince more interest in the subjects and the readers will find the experience rewarding. The Journal will look forward to receive comments and observations to improve upon the future issues.

I as the Guest Editor of this issue wish to thank profusely the Chief Editor, Prof. Dr. Dev Raj Adhikari, Founding President - Nepalese Academy of Management, Dean- Faculty of Management, Tribhuvan University, Nepal and Dr. Dhruba Kumar Gautam, Managing Editor, The International Journal of Nepalese Academy of Management, Associate Professor at Faculty of Management, Tribhuvan University, and Executive Director- Nepalese Academy of Management for the opportunity provided and confidence reposed to edit this issue.

Do Multinational Enterprises Foster Wage Spillovers? The case of the Italian Manufacturing Sector

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Abstract

The increasing flows of FDI at worldwide level may affect local labour markets by improving pay and working conditions for domestic workers. By focusing specifically on the possible indirect effects of MNEs on wages paid by domestic firms to their workers, the present paper aims at testing the impact of incoming FDI on local wages in the Italian manufacturing sector by using firm level data from 2002 to 2007. Results initially show the lack of wage spillovers at both horizontal and vertical level, meaning that the effects of foreign investment are completely internalized within each firm. However, when considering the impact of the technology gap on wage spillovers, we find some significance on the spillover variables. Since the impact of the technological gap on domestic wages can be associated with its different levels across firms, we split our sample into three groups according to the technological absorptive capability of domestic firms (high, medium, and low gap). In this case, our findings suggest the presence of a non-linear relationship between gap size and wage spillover. From a policy perspective this is a potentially important result. It is often taken as given in the literature that FDI can bring potential benefit to the host economy by improving pay and working conditions. Our results here suggest that inward investment may indeed improve the domestic sectors, although such linkage is very complex and depends on the technological capabilities gap. In particular, when this gap is large, MNEs face some difficulty in interacting with domestic suppliers and customers, with the consequence that they could act as (a sort of) monads within

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the host country. In order to avoid this potential danger, policies favoring the attraction of inward investments cannot be of the 'one for all' or 'one for always type but have to be strongly directed towards the sectoral and local characteristics of the host country. In addition, once the sectors in which the multinational presence should be favoured have been selected, policy makers ought to combine investment promotion policies with measures able to support local firms, including the suppliers and customers of MNEs.

Jel classification: F21, F23

Keywords: Foreign Direct Investment, Multinational Enterprises, Horizontal Wage Spillovers, Vertical Wage Spillovers, Technological Gap.

Introduction

The importance of Foreign Direct Investment (FDI) by Multinational Enterprises (MNEs) across world has noticeably increased over the last decades. For instance, the global stock of inward FDI as a percentage of global GDP increased from less than 5% in 1980 to about 30% in 2010 (UNCTAD, 2011). Along with the growing increase of FDI flows, the number of jobs in the foreign affiliates of MNEs has also risen considerably: in 2009, 80 million workers were employed in foreign affiliate firms, accounting for about 4% of the global workforce (UNCTAD, 2010). The distribution of jobs in foreign affiliates of MNEs is generally skewed towards the manufacturing sector, suggesting that the activities of MNEs in manufacturing tend to be relatively more labour-intensive than in other sectors (Arnal and Hijzen, 2008).

In this regard, policy-makers emphasize the potential benefits that FDI bring to the host economies, by improving pay and working conditions. Such benefits may be direct or indirect. Direct benefits refer to benefits for employees in foreign-owned firms, whereas indirect benefits refer to benefits for workers in domestic firms. MNEs can provide higher wages because of their higher productivity which, in turn, is explained by greater technological know-how and modern management practices, which allow them to compete efficiently in foreign markets and offset the cost of coordinating activities across different countries. Similarly, MNEs can lead to indirect benefits by increasing the productivity of domestic firms, when the productivity advantage spills over from foreign affiliates to domestic firms (see Blomström and Kokko, 1998; Smarzynska, 2004; Dimelis, 2005; Jordaan, 2008; Hamida and Gugler, 2009). In particular, the access to knowledge provided by MNEs to the host country may be enhanced if foreign enterprises' knowledge is absorbed by local workers, thus making the domestic workforce more

productive (Aitken *et al.*, 1996): if MNEs bring new ideas and knowledge to the host country, FDI can contribute to raising wages paid by local firms, since the marginal productivity of domestic workers increases. Consequently, equilibrium wages in the domestic labour market should rise in response to the increase in inward FDI flows.

In this framework, this paper aims at testing the impact of incoming FDI on wages in domestically owned companies by using firm level data for the Italian manufacturing sector. In the last ten years, Italy has recorded an increasing flow of inward FDI, whose value increased from 6,911 million dollars in 1999 to 9,498 million dollars in 2010 (UNCTAD, 2011). In particular, in 2009 the number of foreign-controlled firms was 14,155; they employed 1.2 million workers. In the manufacturing sector alone, the number of foreign firms was 3,897, whereas the number of workers employed amounted to 471,515 (ISTAT, 2011). In this regard, we attempt to answer the following research questions: (i) Does FDI have any impact on domestic firms' wages (so called 'wage spillovers')? (ii) If so, to what extent is such an impact related to the existence of productivity spillovers arising from backward and forward linkages between domestic and foreign firms? (iii) Are wage spillovers sensitive to the size of the technological gap between domestic and foreign firms?

In particular, the present paper contributes to the existing literature on wage spillovers in several ways. Firstly, it is the first study which explicitly examines the presence of wage spillovers in the Italian case, as well as being one of the very few works which considers such an issue in a developed country. Secondly, it explores a void in the literature since the previous studies on FDI-related spillovers have generally considered only wages paid by domestic firms due to the presence of MNEs in the same industry (horizontal wage spillovers). To the best of our knowledge, only one study (Quoc Le, 2007) has extended the analysis by considering the possible vertical linkages between foreign and domestic firms (vertical wage spillovers). Thirdly, since FDI-related spillovers depend upon a number of firm-, industry- and, country-specific characteristics, this paper investigates to what extent the level of the technology gap between domestic and foreign firms matters for the likelihood of wage spillovers.

The rest of the paper is organised as follows. Section 2 reports a literature review on the topic. Section 3 depicts our estimation strategy. Section 4 includes some descriptive statistics about the database used. Section 5 describes our findings and, finally, section 6 ends with some concluding remarks.

FDI and Wage Spillovers: A Literature Eeview

Economic literature recognises the benefits that MNEs bring to workers of (a) foreign and/or (b) domestic firms in terms of higher wages paid to employees with similar characteristics. The improved wage paid by MNEs is generally viewed as a 'direct' effect of FDI, whereas the impact on wages paid by domestic firms to their workers as a consequence of the presence of MNEs is known as an 'indirect' effect. It is worth noting that the existence of possible wage benefits to some workers should not generally occur in a competitive labour market, unless firms employ more skilled workers or have to compensate the workforce for undesirable differences in the characteristics of jobs, such as lower job security (Arnal and Hijzen, 2008).

Regarding the 'direct' effect of FDI, the presence of market failures may explain the reason why MNEs can offer better pay to their workers. In particular, MNEs may pay an efficiency wage to (i) reduce worker turnover, (ii) minimize the risk of their productivity advantage spilling over to competing firms, and (iii) motivate workers in the presence of high monitoring costs related to asymmetric information. Moreover, in the context of search frictions, the productivity advantage of MNEs may give rise to rent: insofar as such rent is shared with workers, better firms promote better jobs. Finally, there may be institutional factors that provide incentives for MNEs to go beyond local labour practices. For example, in developing countries - where the rule of law is weak - MNEs may be more likely to comply with national labour laws because of reputational concerns and consumer pressure in their home markets.

The 'indirect' effect may happen because the productivity advantage of MNEs spills over to local firms, or because the employment activities of foreign-owned firms affect the local labor market. In particular, the productivity advantage of MNEs can spills over to local firms through four channels: (i) the 'competition effect' (i.e. the increased competition brought by MNEs stimulate domestic firms to increase their productivity by updating manufacturing technologies); (ii) the 'imitation and demonstration' effect (i.e. domestic enterprises can imitate foreign technologies and management practices, thus increasing their productivity); (iii) the domestic linkages at backward level (by subcontracting activities between MNEs and local suppliers) and at forward level (between MNEs and domestic buyers); (iv) the workers' mobility and training (acquired by foreign firms and transferred to local plants).

The presence of MNEs in the local labour market may affect both labour demand and supply. The entry or the expansion of foreign firms' activities

can increase local labour demand, and consequently wages. Moreover, to the extent that MNEs pay higher wages, incoming FDI may reduce the supply of labour towards domestic firms that, consequently, have to pay higher wages to hire workforce.[1]

Specifically, the empirical evidence on the 'indirect' effect of FDI is not as vast as that on productivity spillovers; moreover it has often produced contrasting results. For instance, by using manufacturing industries data for Mexico, Venezuela and the US, Aitken *et al.* (1996) find evidence of positive effects on domestic firms' wages in the US, but negative in the case of the first two countries. In South Carolina, Figlio and Blonigen (2000) find that the effect on aggregate wage levels of a large new foreign investment is not only the result of high wages in the foreign-owned plants, but may involve spillovers to domestically-owned plants. A study by Girma *et al.* (200l) on the UK manufacturing sector finds that there is no significant evidence of spillovers when they are assumed to be identical across industries and firms. However, when the effects are permitted to vary across industries, wage spillovers are found and are higher in industries where the productivity gap between foreign and domestic firms is lower. Bedi and Cieslik (2002) analyse Polish manufacturing industries and find a positive link between wages and foreign presence. Similarly, Faggio (2003) explores the link between FDI and wages in Poland, Bulgaria and Romania: her results suggest that higher levels of foreign activity are associated with higher local wages in all countries, although FDI effects vary substantially across sectors. Using panel data at plant-level for the UK electronics industry, Driffield and Girma (2003) find that FDI has a large positive effect on wages in domestic firms through their impact on labour demand, as well as a small positive effect through their impact on labour supply. Examining a cross-section dataset of Indonesian firms, Lipsey and Sjoholm (2004) find that wages in locally owned firms are higher in industries within provinces with a large foreign presence. Also, as the definition of the labour market becomes finer (the three digit and five digit levels), spillover effect for white collar workers is higher than for blue collar workers. Using data for the Irish manufacturing industry, Barry *et al.* (2005) find negative wage spillovers for domestic exporting firms, but no wage effect for non-exporters, probably because of the labour market crowding out effect. Hale and Long (2008) use a World Bank survey data set

1. It is worth noting that the presence of MNEs may also contribute to decreasing the wages paid by domestic firms. The possible reason for negative wage spillovers is that foreign firms steal the best workers, i.e. high wage workers from the local firms (so-called labor-market crowding out); moreover, the competition between local and foreign firms in the product market decreases the profitability of local firms which, in turn, may lead to wage reductions in these firms (so-called product-market crowding out).

of Chinese enterprises finding that the presence of FDI has both direct and indirect effects on the wages of skilled workers, although the indirect effect seems to be limited only to private firms.

When looking at the effects of *vertical* linkages from MNEs on wages in domestic firms, the empirical evidence is even poorer. Among the very few studies on vertical wage spillovers, we quote in particular Quoc Le (2007) who employs firm level data for Vietnam and finds that domestic firms with backward linkages to foreign firms pay higher wages to their employees. Moreover his findings suggest that vertical wage spillovers vary across a number of firm and industry characteristics, such as the firm size, the ownership type of enterprises, and the technological level of industries.

Methodology

To investigate the effects of FDI for the wages paid by domestic firms, we start from the neoclassical equilibrium condition in the labour market:

$$W = p * MP_L \quad \ldots (1)$$

where W represents the wage rate, P the output price in each industry, and MP_L the marginal product of labour.

Following Aitken *et al.* (1996), and Bedi and Cieslik (2002), we assume that the production function is represented by the following Cobb-Douglas:

$$Y = TFP(FDI) * F(L, K) \quad \ldots (2)$$

where Y is the output, L the labour employed, K the capital, FDI the foreign presence, and TFP the total factor productivity which, in the presence of spillovers, is influenced by external investments.

Assuming that supply of labour $L(W)$ is equal to W^v, where v represents the elasticity (that we assume to be positive), on the basis of equation (2) condition (1) becomes:

$$W = P * TFP(FDI) * F_L(L(W), K) \quad \ldots (3)$$

where $F_L(L(W), K)$ indicates the partial derivative of output with respect to labour.

By supposing that A is an exponential function of the foreign presence, the logarithmic transformation of equation (3) is:

$$\ln(W) = c + a_1 \ln(P) + a_2 FDI + a_3 v \ln(W) + a_4 \ln(K) \quad \ldots (4)$$

where a_3 and a_4 represent the input shares of capital and labour respectively. Re-arranging equation (4), we obtain the following regression specification:

$$\ln W_i = d + b_1 \ln P_i + b_2 FDI_i + b_3 \ln K_i + \varepsilon_i \quad \ldots (5)$$

where:

$$d = c/(1 - a_3 v)$$
$$b_1 = a_1/(1 - a_3 v)$$
$$b_2 = a_2/(1 - a_3 v)$$
$$b_3 = a_4/(1 - a_3 v)$$

Equation (5) controls for the effects of capital (both domestic and foreign) on wages: consequently, a positive coefficient b_2 implies a positive relationship between wages and the presence of foreign firms as long as v is not infinitive (i.e. the labour supply is not perfectly elastic).

Since the aim of this study is to investigate whether a higher foreign presence is associated with higher wages offered by domestic firms producing not only at intra-industry (horizontal spillovers) but also at inter-industry level (vertical spillovers), we break down the foreign presence variable (FDI) into three components:

$$FDI = f(HSPILL, BACKSPILL, FORSPILL) \quad \ldots (6)$$

where *HSPILL* represents the horizontal spillover (i.e. the spillover effect towards local firms in the same sector of foreign enterprises), *BACKSPILL* the backward spillover (i.e. the vertical spillover towards local firms that supply inputs to foreign enterprises), and *FORWSPILL* the forward one (i.e. the vertical spillover towards local firms that buy inputs from foreign enterprises). Moreover, we add *year d*ummy variables in order to control for macroeconomic shocks or unobserved time varying factors. All in all, we estimate the following *reg*ression:

$$\begin{aligned} \ln(W)_{ijt} = {} & f + e_1 \ln(P)_{jt} + e_2 HSPILL_{jt} + e_3 BACKSPILL_{jt} + \\ & + e_4 FORWSPILL_{jt} + e_5 \ln(K)_{ijt} + e_6 D_t + g_i + \varepsilon_{it} \end{aligned} \quad \ldots (7)$$

where the subscript i denotes firms, j industries, and t time, g_i is a time invariant plant-specific term estimated both as random and fixed effects.

Finally, the error term $\varepsilon_{it} \sim$ IID $(0, \sigma^2)$ accounts for possible stochastic shocks at the firm level which may affect the dependent variable.

Data, Variables and Descriptive Statistics

In this section we present the dataset (section 4.1), the variables specification (section 4.2), and some descriptive statistics (section 4.3).

Dataset Construction

The empirical analysis has been conducted by using manufacturing firm-level data from the AIDA (*Analisi Informatizzata Delle Aziende*) database, provided by the Bureau Van Dijk. AIDA. Such database, recently used in an increasing number of empirical studies (e.g. Reganati and Sica, 2007; Colombo and Stanca, 2008; Ferragina et al., 2011; Imbriani et al., 2011), collects the annual accounts of Italian enterprises and contains information on a wide set of economic and financial variables, such as sales, number of employees, value added, R&D, start-up year, sector of activity as well as the ownership status. In order to study the spillover effects of foreign firms on domestic firms, we have identified all Italian firms whose Global Ultimate owner is foreign.[2]

By omitting all observations for which the necessary data are incomplete, and after excluding outliers and having dropped unusual changes in observations that seemed to be possible errors,[3] we obtained an unbalanced panel of about 551,000 observations over the period 2002-7.

The advantage of using such a dataset is twofold. Firstly, it is highly representative of the entire universe of corporate companies (e.g., in 2007, our sample covers about 87% of total employees declared by the Italian National Institute of Statistics – ISTAT 2008). Secondly, our dataset reflects reasonably well the actual size distribution of firms in the Italian economy characterized by a large weight of micro and small enterprises. In order to measure the vertical spillovers, we employed an Input-Output matrix relative to the years 2002-7, provided by ISTAT. Finally, each variable included in our database was deflated through the price index (3-digit industry level) also provided by ISTAT.

2. Although the AIDA database offers a flexible definition of ultimate ownership (over 25% or over 50%), in our analysis we consider only a share of 25%. Moreover, as the data were collected year by year, the ownership status variable is time-variant.
3. Data for very small firms are often irregular and untrustworthy, and negative value of cost and number of employees might be an indication of misreporting.

Variables' Definition

Wages are defined as the log of average wages, computed at the firm level, as total labour costs over the number of employees. The capital stock variable (K) is defined as reported tangible fixed assets in millions of Euros by each firm. As a price variable (P), we use the producer price industry, at the Ateco 3-digit industry level.

In order to consider the wage spillover at both intra- and inter-industry level, we employ the following variables:

$$HSPILL_{jt} = \frac{\sum_{i \in j, i=MNEs} OUTPUT_{ijt}}{\sum_{i \in j} OUTPUT_{ijt}} \quad \ldots (8)$$

Specifically, HSPILL (horizontal spillover) captures the extent of foreign presence in sector *j* (3-digit industry level) at time *t*, defined as share of foreign output in the sector. BACKSPILL (backward spillover) is a proxy for the foreign presence in the industries that are being supplied by sector *j*. It is intended to capture the extent of potential contacts between domestic suppliers and multinational customers (γ_{jkt} is the proportion of sector *j*'s output supplied to sourcing sectors *k* obtained from the input-output table for domestic intermediate consumption - i.e. excluding imports). FORWSPILL indicates the forward vertical spillovers to local firms that buy inputs from foreign firms (δ_{ljt} is the proportion of sector *j*'s inputs purchased from upstream sectors *l*) (for details see Pittiglio *et al.*, 2008; Imbriani *et al.*, 2011). We also experiment with the employment share of foreign ownership. Results are robust for both measures of FDI activity. However, in our analysis we focus essentially on output rather than employment shares, since the latter might raise endogeneity problems given that the dependent variable is defined as total labor costs over employment.

Descriptive Statistics

Table 1 compares the distribution of Italian firms by ownership status and size (small, medium and large firms), the latter measured by the number of employees.[4] According to the figures, domestic firms represent the largest percentage of Italian firms, and are mainly of smaller size, while the share of foreign firms is very small.

Table 1: Distribution of Italian firms by size and ownership status (percentages, sample average)

4. Where small firms have 1-49 employees, medium firms 50-249, and large firms more than 250 employees

	Foreign Firms	Domestic Firms	Total
1≤SIZE≤49	0.3	99.7	89.4
50≤SIZE≤249	3.3	96.7	9.3
SIZE≥250	11.7	88.3	1.4
TOTAL	**0.8**	**99.2**	**100.0**

Source: Authors' elaborations based on the AIDA database

As discussed in Section 2, many studies on wage spillovers from FDI have found that foreign firms pay higher wages than their domestic counterparts. In this section, through a simple descriptive analysis, we aim at investigating whether this also happens in the Italian manufacturing sector over the period taken into account. In table 2, we compare average wages paid by foreign and domestic firms (columns 1 and 2), the employment distribution between the two above-mentioned types of firms (columns 3 and 4), and then the share of foreign employment on the total workforce by sector (column 5). Moreover, we advance some hypotheses about the relationship between foreign presence and wages paid by Italian firms (Figure 1).

Table 2: Descriptive statistics by ownership status and Sector of activity (sample averages)

	Wage*		Employment (%)§		Share of foreign employment on the total workforce by sector
	Foreign firms	Domestic firms	Foreign firms	Domestic firms	
	(1)	(2)	(3)	(4)	(5)
Food products and beverages	1.51	1.30	5.86	3.39	3.89
Tobacco products	1.68	1.26	7.76	10.05	13.71
Textiles	1.41	1.27	1.66	3.60	0.65
Wearing apparel, dressing and dyeing of fur	1.47	1.23	1.82	2.67	1.36
Leather, Leather products and footwear	1.41	1.27	1.91	2.64	1.14
Wood and products of wood and cork	1.53	1.25	0.52	2.22	0.13
Pulp, paper and paper products	1.48	1.29	6.35	4.06	7.26
Printing and publishing	1.46	1.28	3.01	2.53	1.40
Coke, refined petroleum products and nuclear fuel	1.53	1.52	6.99	7.23	18.01
Chemicals and chemical products	1.60	1.37	6.75	6.10	23.18
Rubber and plastics products	1.44	1.30	4.42	3.95	5.99
Other non-metallic mineral products	1.52	1.30	3.77	3.51	3.82
Basic metals	1.48	1.33	3.88	8.25	3.75

Fabricated metal products	1.48	1.31	2.77	2.98	2.00
Machinery and equipment	1.54	1.77	4.01	3.98	5.67
Office, accounting and computing machinery	1.63	1.27	4.08	2.40	7.82
Electrical machinery and apparatus	1.51	1.31	5.75	4.97	8.81
Radio, Television and communication equipment	1.54	1.81	5.90	4.39	11.13
Medical, precision and optical instruments	1.52	1.31	2.99	3.42	7.07
Motor vehicles, trailers and semi-trailers	1.84	1.33	12.27	9.05	17.08
Other transport equipment	1.55	1.39	4.40	6.02	3.25
Manufacturing n.e.c.	1.44	1.27	3.14	2.59	1.58
Total Manufacturing	1.55	1.41	100.00	100.00	5.87

Source: author's calculations based on AIDA database

From table 2 we note that foreign firms paid 14% more than domestic enterprises during 2002-7. Industries such as 'Motor vehicles, trailers and semi-trailers', 'Tobacco products', and 'Office, accounting and computing machinery' are those where foreign firms paid higher wages than domestic firms. Only with regard to 'Radio, Television and communication equipment' and 'Machinery and equipment', did domestic firms pay higher wages than foreign companies, approximately 15% and 13% more, respectively.

Looking at the share of foreign employment on the total workforce by sector (column 5), we observe that sectors such as 'Chemicals and chemical products', 'Coke, refined petroleum products and nuclear fuel', and 'Motor vehicles, trailers and semi-trailers' are characterized by a higher percentage of employment in foreign firms.

By plotting the average wages of Italian firms and the foreign presence by industries (Figure 1), we observe a positive yet slight regression line slope that highlights a weak positive wage spillover effect. The correlation between the two variables is about 0.3.

FIGURE 1: Ln (Average wages) of Italian firms and foreign presence by industries

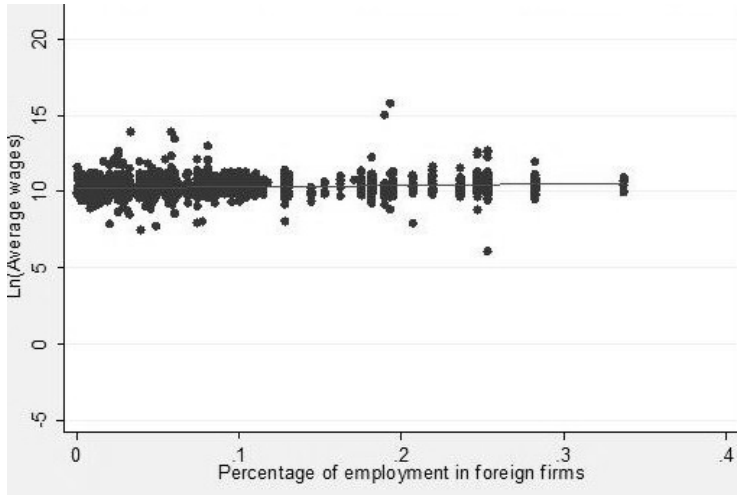

Table 3 provides the mean of the variables for the whole sample distinguished by ownership type, as well as comparison tests of means for the two groups of firms (domestic *versus* foreign firms). We focus our attention on a number of firms' level variables such as: size (i.e. number of employees), wage (i.e. average wages), TFP (i.e. residuals from a Cobb-Douglas production function using the Levinsohn and Petrin estimation method), capital (i.e. tangible fixed assets), and age (i.e. difference between year *t* and the year of incorporation). The figures suggest that foreign firms are larger, more productive and capital intensive than domestic ones.

Table 3: Mean statistics and t-test of comparison of means of domestic versus foreign firms

	Mean			
	Domestic Firms	**Foreign Firms**	**Diff**	**t**
Size	28.63	220.22	-191.59	-39.35***
Wage	25617.12	35112.60	-9495.5	-0.18
TFP	9.51	10.41	-0.90	72.94***
K	12.12	14.21	-2.09	-65.51***
Age	23.44	24.42	-0.98	-0.49

Notes:

*** = statistically significant at 1% level.

Estimation Results

In order to choose the appropriate estimation technique for the model, we first performed the Lagrangian Multiplier (LM) test developed by Breusch and Pagan (1979). Since the null hypothesis that the individual effect is zero was rejected at the 0.1% significance level, we deduced that the cohort effect is statistically different from zero and that the pooled regression is not appropriate for our model. Consequently, we implemented the F-test for the null hypothesis that the cross-sectional units all have a common intercept. The results obtained suggested rejection of the null hypothesis. This also means that the OLS estimator is biased and inconsistent so we accepted the presence of individual effects. Finally, we ran the Hausman test to decide between a random-effects or a fixed-effects model.[5] The null hypothesis that the random effect model is more efficient (has smaller asymptotic variance) than the fixed effect model was rejected at the 0.1% level: thus, the fixed effect model was most appropriate to estimate our model. We also tested for possible panel-level heteroskedasticity and autocorrelation. Given the results from the Wald test for groupwise heteroskedasticity in the fixed effect model,[6] we rejected the null hypothesis of homoskedasticity. In addition, the Wooldridge test for autocorrelation in panel data suggested that the errors are auto correlated. Therefore, to ensure validity to our results, we followed other studies on panel data that adjust the standard errors of the estimated coefficients for possible dependence in the residuals (Hoechle, 2007). Finally, we performed the F-test for the joint significance of the time dummies that rejected the null hypothesis of non-significance at 1% level. Estimation results of model (7) are reported in table 4.

Table 4: Results from estimation of equation (7)

Regressors	**(i)**	**(ii)**	**(iii)**	**(iv)**	**(v)**
ln(P)	0.263***	0.265***	0.267***	0.274***	0.277***
	(0.0123)	(0.0126)	(0.0119)	(0.0192)	(0.0154)
ln(K)	0.120***	0.118***	0.120***	0.115***	0.115 ***
	(0.0281)	(0.0278)	(0.0282)	(0.0286)	(0.0285)
HSPILL	0.0182	0.0174	0.018	0.023	-0.0545
	(0.0445)	(0.0448)	(0.0415)	(0.0452)	(0.0363)
FORWSPILL	0.0401	0.0417	0.0342	0.0329	0.0996

5. The Hausman specification test compares the fixed versus random effects under the null hypothesis that the individual effects are uncorrelated with the other regressors in the model. If correlated (i.e. if H_0 is rejected), a random effect model produces biased estimators, thus violating one of the Gauss-Markov assumptions. Consequently, a fixed effect model is to be preferred.
6. Test implemented in Stata by Baum (2006).

	(0.0472)	(0.0474)	(0.0453)	(0.0473)	(0.0828)
BACKSPILL	0.0872	0.0899	0.112	0.104	0.0737
	(0.219)	(0.221)	(0.212)	(0.223)	(0.025)***
ln(size)		0.00433***			
		(0.000854)			
Age			0.279***		
			(0.0153)		
Gap				-0.054***	
				(0.0082)	
gapHSPILL					0.0263
					(0.0107)***
gapFORWSPILL					-0.0192
					(0.0121)
gapBACKSPILL					-0.0758
					(0.0252)**
Constant	7.307***	7.315***	7.270***	7.319***	7.302***
	(0.398)	(0.395)	(0.423)	(0.439)	(0.419)
Year Dummy	Yes	Yes	Yes	Yes	Yes
N. obs.	500,635	500,575	488,753	475,037	475,037

Notes:

Robust standard errors in brackets

*** = statistically significant at 1% level.

** = statistically significant at 5% level.

* = statistically significant at 10% level.

Looking at column (i), wage spillover(s) coefficients (both at horizontal and vertical level) are not statistically significant. This means that the effects of foreign investment seem to be completely internalized within each firm. These results broadly confirm the lack of horizontal productivity spillovers in the Italian case, as already found in the works of Reganati and Sica (2007), and Imbriani and Reganati (2004) who find evidence of positive but not statistically significant intra-industry spillovers. The coefficient on the 'capital' variable is statistically significant at the 1% level, meaning that it is highly correlated with wages: in other words, investment in new machinery and equipment has a positive impact on wages. This result was widely expected on the basis of the circumstance that the spillover coefficients should presumably capture wage increases, which are a reflection of a rise in workers' productivity, whereas the 'capital' coefficient should reflect the impact on new investment in physical capital on the firm's labour demand. Similarly, the coefficient on the 'price' variable is statistically significant at 1% level, thus implying a positive correlation between price level and wages.

Since the magnitude of inward FDI-related spillovers is potentially influenced by several factors, to check the robustness of our results, we re-estimated equation (7) by adding some control variables that might affect domestic firms' wages. Such determinants may enhance the mechanisms - depicted in section 2 - through which spillovers take place (competition effect, demonstration effect, etc.). On the basis of the main literature, determinants may be broadly classified in three groups:

1. **MNE-related aspects:** MNEs' country origin and/or level of MNEs' control on their affiliates (Zhang *et al.*, 2010);

2. **Host country and industry specific characteristics:** level of financial system development (Massoud, 2008), degree of openness to trade (Winters, 2004; Romer, 1994), degree of market competition (Sjöholm, 1999; Kokko, 1996);

3. **Domestic firms' specific characteristics:** size (Zhang *et al.*, 2010; Kim, 1998), age, percentage of ownership by foreign affiliates (Blomström and Sjöholm, 1999), level of technology used in domestic firms compared to MNEs (Imbriani *et al.*, 2011; Sjöholm, 1999; Imbriani and Reganati, 1997, Kokko *et al.*, 1996; Kokko, 1994)

In the light of this, we checked the robustness of our model by re-estimating equation (7), adding some of the above determinants.

First, we introduced a firm size measure defined as firm *i* sales at time *t* over average firm sales in the industry (3-digit level), expressed in logs, to control for those cases when firms pay higher wages just because they have a larger market share (column ii). Again, we find that the presence of MNEs does not contribute to raising the wages paid by local firms, to their workers at either intra-industry level or vertical level. The coefficient on the firm size, as expected, is positive and statistically significant at the 1% level, meaning that large firms can earn higher profits that might be partly distributed to their employees.

Second, we considered whether the impact of foreign presence on domestic firms' wages is robust to the inclusion of an age variable, calculated as the difference between year t and the official year of incorporation of the firm (column iii). Once again, the coefficients of HSPILL, BACKSPILL, and FORWSPILL are not significant. On the contrary, the coefficient on the age variable is positive and statistically significant, thus indicating that wages are higher in older plants. This result is at odds with the hypothesis that newer firms are likely to employ more productive workers.

Does the Technology Gap Matter for Wage Spillovers?

Finally, we considered the impact of the technology gap on wage spillovers. The relationship between the degree of spillovers and the size of the technology gap between foreign and local firms is a controversial issue in the literature. Some scholars (Wang and Blomström, 1992; Wang, 1988; Findlay, 1978; Koizumi and Kopecky, 1977) have pointed out that spillovers grow with the size of the technology gap between domestic and foreign firms; from this viewpoint, a country's technical efficiency is an increasing function of its capital stock of foreign residents who are assumed to possess greater technical knowledge. The opposing position follows the technological-accumulation literature (Cantwell, 1989), where spillovers are more likely to occur in those industries where the technology gap is small. When foreign affiliates invest in sectors which are centers for innovation, they are likely to have a positive impact on the host country economy since, through competition, they stimulate research and innovation in local firms. It is worth noting that the technological gap may be relevant both at horizontal and vertical level. At horizontal level, the magnitude of spillovers is likely to depend on the technological sophistication of local firms; similarly, at vertical level, the extent of backward (forward) linkages between MNEs and local suppliers (buyers) of intermediate goods is likely to depend upon the stock of technological capabilities of domestic firms in supplying (buying) sectors.

In order to take into account the impact of the technological gap, we built the variable *GAP* defined in terms of TFP gap for each firm, i.e. as the difference between its total factor productivity and that of the average foreign firm in the same sector (Jabbour and Mucchielli, 2007; Flores *et al.*, 2007). The results (column iv) do not change significantly: both capital and price are still positive and statistically significant at 1% level, whereas variables measuring both horizontal and vertical spillovers are still not statistically significant. The negative and significant coefficient of the technological gap variable suggests that negative wage spillovers occur in those firms that are technologically less advanced: in other words, when the technological gap between local and foreign firms is high, then the workers employed in domestic firms seem to suffer from the presence of foreign enterprises in terms of lower wages.

Another way of taking into account the foreign presence consists in interacting the FDI spillovers variables with the gap distance variable (column v). The backward spillover is now positive and significant at 1% level, although, when interacted with the technological gap, its sign changes. We also find that the variable HSPILL, when interacted with the technological gap, turns significant at 1% level.

Until now, our results seem to suggest that in the case of a technological gap, the presence of foreign firms contributes positively to the wages paid by domestic firms in the same sector, and negatively to the wages paid by local firms with backward linkages to foreign affiliates.

The fact that the technological gap affects domestic wages may be associated with its different levels across firms: in other words, the gap may matter for the diffusion of spillovers only within a certain range. For this reason, in order to explore the possible differences in the pattern of wage spillovers across different groups of firms (so-called conditional spillovers), we split our sample into three groups according to the technological absorptive capability of domestic firms. In other words, we selected some *ad hoc* values from the observations to split our sample into three sub-samples (low, medium, and high gap). Specifically, the group with low technological absorptive capability consists of firms below the 25th percentile; the medium technological absorptive capability group contains firms between the 25th and 75th percentile; the high technological absorptive capability group includes firms above the 75th percentile (Imbriani *et al.*, 2011). The results of our estimation are reported in table 5.

Table 5: Group estimation according to the technological gap.

Regressors	**Dependent variable: ln(W)**		
	High Gap	**Medium Gap**	**Low Gap**
ln(P)	0.113	0.338	0.392
	(0.044)**	(0.034)***	(0.035)***
ln(K)	0.182	0.100	0.043
	(0.009)***	(0.006)***	(0.004)***
HSPILL	0.230	-0.070	-0.017
	(0.0827)***	(0.0598)	(0.1062)
FORWSPILL	-0.071	0.160	0.142
	(0.041)*	(0.040)***	(0.0735)**
BACKSPILL	-0.700	0.420	0.448
	(0.3431)**	(0.25)*	(0.4148)
Constant	7.206	7.187	7.802
	(0.2327)***	(0.1907)***	(0.1734)***
Year Dummy	Yes	Yes	Yes
N. obs.	148,159	242,712	109,766

Notes:

Robust standard errors in brackets

*** = statistically significant at 1% level.

** = statistically significant at 5% level.

* = statistically significant at 10% level.

Results from table 5 show that coefficients on the capital and price level variables are positive and highly significant, as expected. It is also worth noting that the size of the technological gap matters significantly for the wage spillover that follows a non-linear relationship. In particular, we find that (i) horizontal wage spillovers are significantly positive only when the size of the technological gap is large; (ii) vertical spillovers at forward level are positive in the case of low and/or medium gap, but negative when the technological distance between domestic and foreign firms is large; (iii) vertical spillovers at backward level are positive only in the case of medium gap but turns negative when the technological gap becomes large.

To summarize our results, we firstly see that when domestic firms are technologically distant from foreign ones, an increase in the MNEs' presence at vertical level decreases average wages paid by domestic enterprises. This might simply reflect a negative impact on the productivity of local firms that are foreign firms-suppliers in upstream industries, or foreign firms-customers in the downstream industries. In the first case, the negative effect would occur because local firms are much less advanced and, consequently, MNEs prefer to import intermediate inputs or to source from other foreign companies, while in the second case (at forward level), inputs produced locally by foreign firms may be too expensive and/or less adapted to local requirements. Both the situations show that there is (a) little scope for interaction between MNEs and domestic suppliers and customers. A reverse situation seems to be true when the technological distance between domestic and foreign firms is medium: in this case, an increase in foreign firms' presence exerts a positive impact on domestic wages at vertical level. Such a positive effect occurs also in the case of low gap although only for forward linkages.

In addition, considering firms operating within the same 3-digit industry, the positive and significant relationship between FDI and wages when domestic firms are technologically distant from MNEs suggest that foreign firms act as a discipline device, which is incremental for the productivity (and wages) of domestic firms, and/or that they are available to accept a certain mobility of workers and even exchange skills and knowledge with domestic firms.

Conclusions

The increasing flows of FDI at worldwide level may potentially affect local labour markets by improving pay and working conditions for domestic workers. By focusing specifically on the possible indirect effects of MNEs on wages paid by domestic firms to their workers, the present paper aims to test the impact of incoming FDI on local wages in the Italian manufacturing sector by using firm level data from 2002 to 2007.

Results initially show the lack of wage spillovers at both horizontal and vertical level, meaning that the effects of foreign investment are completely internalized within each firm. However, when considering the impact of the technology gap on wage spillovers, we find some significance on the spillover variables. Since the impact of the technological gap on domestic wages can be associated with its different levels across firms, we split our sample into three groups according to the technological absorptive capability of domestic firms (high, medium, and low gap). In this case, our findings suggest the presence of a non-linear relationship between gap size and wage spillover. In particular, horizontal wage spillover is significantly positive only when the size of the technological gap becomes larger. Vertical spillovers at forward level are positive in the case of low and/or medium gap, but negative when the technological distance between domestic and foreign firms is large. Finally, vertical spillovers at backward level are positive only in the case of medium gap but turns negative when the technological gap becomes large.From a policy perspective this is a potentially important result. It is often taken as given in the literature that FDI can bring potential benefit to the host economy by improving pay and working conditions. Our results here suggest that inward investment may indeed improve the domestic sectors, although such linkage is very complex and depends on the technological capabilities gap. In particular, when this gap is large, MNEs face some difficulty in interacting with domestic suppliers and customers, with the consequence that they could act as (a sort of) *monads* within the host country. In order to avoid this potential danger, policies favoring the attraction of inward investments cannot be of the 'one for all' or 'one for always' type but have to be strongly directed towards the sectoral and local characteristics of the host country. In addition, once the sectors in which the multinational presence should be favoured have been selected, policy makers ought to combine investment promotion policies with measures able to support local firms, including the suppliers and customers of MNEs.

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Factors Effecting Employees Willingness to Stay in Information Technology Industry

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Abstract

Employer branding can be described as a strategic tool that enables organizations to strive towards retaining the existing employees and attracting new talents. It can also be expressed as a systematic process of building and managing talent pool. The study attempts to continue afresh with a new perspective to the field of human resource and behavioural sciences to employer branding. A sample of 276 IT employees from 11 IT employers listed by NASSCOM was surveyed. Judgmental sampling technique was adopted and a valid questionnaire developed for this research was used to collect data.

The five major media adopted to choose to work with the present employer were personal contacts, friends at the organization, job portals, company's website and campus recruitment. It was found that challenging tasks, good reference for future career, international career opportunity, financial benefits, and work life balance were the top five factors that motivated employees to stay in the organization. The detail findings and implications are discussed in the paper

Key Words: Willingness to stay, employer branding, human resource management, organizational behaviour, recruitment, retention.

Introduction

Today's Indian companies grow in a zone of rapidly changing road signs and technological advance. Companies need to produce goods and services efficiently and effectively. Yet it must do so in a way which imposes least cost on the environment thereby reducing the carbon foot prints. India is now known globally for being one of the successful nations to have adopted IT mantra, which has its roots in the strategic infection started by the success of India's export led software industry.

According to NASSCOM the total IT-BPO industry would reach USD 71.7 billion accounting for 5.8% of India's GDP; software and services revenues aggregated to about USD 60 billion. Software and Services export revenues estimated to grow over 16-17% to reach USD 47 billion. India Inc would remain focused on tactical measures to achieve cost savings and greater productivity. Services and software segments are estimated to cross USD 1.2 trillion by 2012. This is more than the 5.2 per cent growth expected in the total IT spending.

The major source of premium mass employment in recent time in India has been the IT BPO industry. Companies across this vertical were required to equip their employees with a new set of skills. Over time, the industry has enabled the creation of an army of process and vertical specialists with deep knowledge of domain and process functionalities. India's transition to a knowledge-based economy requires a new generation of educated and skilled manpower. The competitive edge will be determined by the ability to create, share and use knowledge effectively.

Employer Brand

The emergence of employer branding as a strategic tool has been the latest trend in Organizational Behaviour and Human Resource Management. Employer Branding is defined as a targeted long term strategy to manage awareness perceptions of employees, potential employees and related stakeholders with regards to particular firm (Sullivan, 2004).The term 'employer brand' was first publicly introduced to a management audience in 1990s and has since become widely adopted by the global management community. Employer brand is defined as the package of functional, economic and psychological benefits provided by employment, and identified with the employing company (Barrow & Ambler, December 1996)

When a company undertakes employer branding, the "product" it is selling is the employment experience it offers, and the "customers" of this product are

current and prospective staff. Benefits, which may include tangibles such as pay and intangibles such as status and a sense of collegiality, are what back up the employer's brand in the marketplace. (Moroko & Uncles, 19, 2012)

The internal marketing concept specifies that an organization's employees are its first market. Themes such as 'internal advertising' and 'internal branding' have recently entered the marketing catalogue. One component of internal marketing that is still underdeveloped is 'employer branding' and specifically 'employer attractiveness'. Employer attractiveness is defined as the envisioned benefits that a potential employee sees in working for a specific organization. It constitutes an important concept in knowledge intensive contexts where attracting employees with superior skills and knowledge comprises a primary source of competitive advantage. (Berthon, Ewing, & Hah, 2005)

Organizations are increasingly using their employer brand to shape their overall people management strategy and not simply for external recruitment purposes. (Kunerth & Mosley, 2011)

The emergence of the concept of Employer brand management has expanded the scope of this intervention beyond communication to incorporate every aspect of the employment experience, and the people management processes and practices often referred to as 'touch-points' that shape the perceptions of existing and prospective employee. (Mosley, 2009)

The concept of Employer brand management addresses the core issues and realities of the employment experience and not simply its presentation. This enables organizations to recruit the right kind of talent to achieve its goals, and the subsequently thedesire for effective employee engagement and employee retention.

(Boxall & Purcell, 2003) Studies have shown the importance of human resources in this dynamic and competitive world. They argued that a company with the latest network facilities just cannot achieve its competitive advantage without highly competent people to utilize them. To attract the best possible workers, companies need to apply external marketing of the Employer Brand to implicate that "We are a company of choice" as the general assumption is that a distinctive brand attracts better human capital to the company. (Backhaus, Kristin , & Surinder Tikoo , 2004).

As for consumer brands, most employer brand practitioners and authors argue that effective employer branding and brand management requires a

clear Employer Brand proposition, also regularly referred to as an Employer value proposition or Employee value proposition (EVP) (Minchington, 2010)

This concept indicates those aspects of the organization would most like to be associated with as an employer; highlight the attributes that differentiate the organisation from other employers; and clarify the 'give and get' of the employment deal balancing the value that employees are expected to contribute with the value from employment that they can expect in return. This latter aspect of the employer brand proposition is often referred to in the HR literature and a critical foundation of Theory and Research based in the 'psychological contract' (Conway & Briner, 2005)

In today's organizational dynamics, internal marketing focuses on communicating the customer brand promise, and the attitudes and behaviours expected from employees to deliver on that promise. There are clear beneficial indications to the organization for employees to understand their role in delivering the customer brand promise, the effectiveness of internal marketing activities can often be short-lived if the brand values on which the service experience is founded are not experienced by the employees in their interactions with the organization. (Lawler III & Worley, 2012)

Trends in employee expectations like quality of leadership and management, culture, pay and benefits and growth and development opportunities are considered to be the most important factors within the employment deal. The question that arises for a vast majority of high-performing employees is whether there is any pattern within these trends. Research report on development of the IBSA workforce innovation survey tool suggests that "Culture" and "leadership and management" are factors that prove to be significantly correlated to each other. Employees who have great interest in culture tend to have high expectations in the quality of leadership and management. A culture that is neither well developed nor aligned with the company's leadership and management practices is unlikely to appeal to a high performer. (Runnalls, Sampson, Boerdkar, & Vamos, February 2009)

Employment choice as a corporate strategy has stood on the reputation as "exciting places to work." It regards as the reputation as an essential part of employer brand and tout this image among graduating classes and in the job market. But there is more to the success than mere smart publicity campaign. The brands of the employers of choice have much higher congruence with the employment deal expectations of the high performers. This holds especially true for the high quality of "culture" and the good quality of "leadership and management." Most companies only partially meet the expectations of their

most valuable employees. They build a basis on which an employer brand can be built successfully focus points being firstly employees are fundamental to the success of the business and secondly what do the high-performing employees expect from the company.

Factors Influencing Employment Choice and Willingness to Stay

Employer branding represents a firm's efforts to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer (Backhaus, Kristin , & Surinder Tikoo , 2004). In recent years employer branding has gained popularity among practicing managers. Given this managerial interest, this research presents a paper to initiate the scholarly study of employer branding.

The relationship between employers and employees willingness and the values they strive for collectively are the cornerstones of employment brand. Employee satisfaction and productivity measurements are tied to organization's desired outcomes for service delivery goals. Prior researches have shown that health systems that foster an environment encourages consistent and open dialog, where employees have a clear understanding of the corporate mission and where challenges and solutions are readily communicated, they generally will have higher retention rates and greater patient satisfaction scores. Strong association and belief in core values leads to greater employee pride, loyalty, and retention - the essence of an employment brand. (Kathwala, 2012)

Based on the studies factors such as challenging tasks, products / services, financial benefits, retirement insurance, flexible working hours, secured employment, good reference for future career, special perks, inspiring colleagues, stock options, international career opportunity, support staff for domestic help, leadership, training programs , leave and vacation policy, variety in tasks, location, wages / salary, overtime payment benefits, work life balance, project based work, vehicle loan / discount facility were identified as drivers for employees to be motivated to stay and as important factors that would influence employees to consider a change of organization. These factors though inter- connected are perceived as independent in the minds of employees and are critical while making the decision to stay or quit. As there is no empirical research on the exact factors available, a comprehensive factor analysis is made to gauge the trend in the decision process. These processes are driven both internally and externally.

Literature Review

The literature of employer branding is full of discussions about the lack of effective policies, underutilization of employer branding programs including factors that effect employment choice.

An employer's key success relies on its ability to attract and retain key performers. Employees who are able to deliver the best results, achieve business objectives, and contribute significantly to corporate value. Companies have always understood that finding the right people is critical for business. In the past, employers used mass communications to reach ideal employees, and that was all right in a rather homogeneous and geographically isolated world. Yet today, communication experts and leaders are expected to be culturally dexterous (Pound, 2009), as audiences are fractured in various likes and dislikes, into diverse values and sub-cultures, and society as a whole has become more complex and segmented. Due to this, organizations are confronted with the challenge to create a common identity and vision in a multicultural world. If organizations are able to build consensus among their people, unity will result in greater performance. Often this boils down to establishing a common ground of work ethics and culture (Pitta, Gay Fung, & Isberg, 1999), one that can lead people in the right direction. The matchmaking between employer and employee thus needs to be done correctly if there is to be a harmonious environment in the organization.

If not undertaken well, breakups between the two are bound to happen and are a real inconvenience for both parties. What facilitates this matchmaking process is what is called "personality targeting" (Dahlstrom, Communicating with Talent - The rise of Personality Targeting, 2012) the practice of identifying and engaging with a group who share the organization's culture—that's the area in which employer branding is developing. Historically, candidates applied to companies for a job. Now, companies will apply to candidates. Due to the effects of an aging population, there will be a shortage in the supply of a talented workforce by 2014 (Hanely, 2012).

It has been published in one of the article on matchmaking employers with Employee: the era of personality targeting that between now and 2030, the number of people over 65 will increase by more than 40% in the European Union. The fertility rate is currently below 2 in the E.U. and 2.1 in the U.S. In Russia and China, there is a known "depopulation bomb." In China, the one child policy is resulting in the cousin disappearing from the family tree. In Japan, the median age (44) and life expectancy (83) are among the highest in the world and its birth rate (1.4 per woman) is among the lowest anywhere.

Due to these seismic movements, the competitions to attract and retain key performers will become fiercer—companies will solicit candidates and not vice versa. (Dahlstrom, Matchmaking Employers with Employees : the era of Personality Targeting, March 2011).

As companies across verticals face the new challenges in retention of talent pool, the focus has moved away slightly from targeting individuals based on their personal credentials to targeting individuals based on their personal values. A whole new communication disciple is being born, whereby recruiters are now trying to identify and target people who have the right cultural fit to the organization instead of skills or qualifications per se. And due to demographic shifts and a more sophisticated recruitment market, personality targeting has become imperative therefore questioning organizations' whether or not companies wish to secure their talent pipeline.

Workforce is more diverse and sophisticated presently compared to five decades ago. All these indicate that the employers will need to find ways to appeal to various audiences, which will require them to be flexible in what they offer. Yet employers will also need to create a culture of their own and find members who belong to the corporate family. Based on a few researches during the economic recession of 2008, it has literally changed the way people work. The work world has become more flexible, more freelance, more collaborative, and far less secure.

Every future leader will have to be culturally dexterous, knowing how to motivate and reward people of different backgrounds. To overcome generational and cultural differences and ensure solidarity in the workforce, will be dictated by an organization's ability to forge a corporate culture and identify individuals who have a strong affinity to the same ideals. The means to this end is personality targeting. (Price watehouseCoopers LLP, July 2009)

Need and Rationale of the Study

Researchers have done an incredible job of working on gaps and getting us to understand and respond to latest trends in HR and OB. To a somewhat lesser degree, organizations also have a pretty good idea what a company's external corporate branding stands for. It's only more recently, however, that business has started to focus on the power of employer branding.

Employer or internal branding works to influence employees' propensity to be attracted to, remain with and be motivated to sustain business objectives.

The goal is to become an employer of choice by reflecting those attribute that employee's value. (Hunt & Landry, 2012)

The root cause for the shortage of skilled manpower is the poor quality of higher education in the country (Kathwala, 2012). The poor availability of talent in India is constraining the execution of business strategy. Employers use a variety of tools to influence how employees perceive the overall value of their employment relationship. So when the objective is to maximize organization's equity by attracting, retaining and motivating the right employees, as an employer it pays to focus on his brand.

The keys to strategic differentiation to deliver sustainable achievement over the long haul is through the pursuit of three simple goals that together represent the universal truth of all strategic differentiation. They are to be a Company of Choice, an Employer of Choice and an Investment of Choice.

Supporting redundant workers through outplacement services is not just morally right, it's a highly effective way of retaining and motivating those left behind. Green credentials can boost employee loyalty (Glover, 2011),With rising fuel prices hitting workers' wallets, an employer's green credentials are becoming an increasingly important retention tool as well as something nice to have from a brand perspective. If they like the brand, they'll join. Even for senior managers, a company's reputation is almost as important as the amount of money they are offering when it comes to deciding whether or not to accept a job. Poor interviewers drive away talent. Many organizations are fatally undermining their recruitment and retention efforts because inept or downright rude interviewers are making a negative first impression with job seekers. The present study is an attempt to identify the media adopted to find the employer of choice, factors motivating employees to stay and quit. Both of these behaviours are explored in the context of employee's perception of trust.

Methodology

Employer Branding For the purpose of this research Employer Branding shall be defined as a brand exercise where employees remain with the company for an extended period of time because they have a genuine positive feeling about the job (Backhaus, Kristin , & Surinder Tikoo , 2004). Employer branding represents a firm's efforts to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer.

Employment Choice – for the purpose of this research employment choice can be termed as a decision made by an employee to choose to work with an organization over the other.

Willingness to stay – is defined as a decision of an employee to stay with the current organization even when he has an opportunity to choose to quit, unless be asked to leave.

Sample Size

A sample size of 276 employees with minimum of 2 years' experience from the Information Technology companies, in Bangalore city were surveyed for the present investigation. 11 IT companies were included in the final study as the other 9 companies were not willing to participate in the survey. The top 20 IT companies were selected based on the NASSCOM report.

Sampling Technique

The method adopted for this research was judgmental sampling method. The judgment was that the questionnaire was given to employees with minimum two years' experience. This ensures that the respondent is aware of the organizational issues and programs, and also will be able to indicate trust towards the organization.

Measures Adopted

Based on the objectives of the study a questionnaire was constructed. The developed questionnaire was circulated to 5 employers, 5 managers, 5 employees, 6 OB/HRM experts (3 Industry and 3 academic), 6 marketing experts (3 Industry and 3 academic). A total of 27 experts validated the questionnaire. After changes the questionnaire was pilot tested on 50 IT employees and after minor modifications the final questionnaire was sent to 450 employees and 276 fully filled in questionnaires were received to analysis. The response rate was 61.33%.

Respondent Profile

Majority of the respondents were males (21.7% were females and 78.3 % were male). 65.2% of the respondents belong to the age group of 25 to 35 years of age followed by 17.8% below 25 years of age and 17% between 36 to 45 years of age. 18.8% of the respondent worked for TCS followed by CTS (15.6%). 13.4% belonged to Igate Patni. 11.2% belonged to Mindtree Ltd.,9.1% belong

to L&T Infotech, 8.7% HCL Technologies, 7.2% to Infosys. 6.2% belonged to Sonata followed by Wipro with 4.3 % and Mphasis with 3.3%. Accenture had the least number of respondents with 2.2 %. Most of the respondents were from the entry level management (71.7%, followed by middle management (20.3) and the least were from senior management (8%). Majority of the respondents worked for 2-5 years in the current organization (96.7%) and only 3.3 percent worked for more than 5 years. Majority (73.9%) of the respondents had a total work experience of 5 to 10 years. 17.8% had work experience of 2 to 5 years and 8.3% had total work experience above 10 years.

Results

To identify the media adopted to work with the present employer

Table 1 indicating the observed and expected frequency in descending order

Media	Observed N	Expected N	Residual
Personal Contacts	79	16.2	62.8
Friends at the Organization	48	16.2	31.8
Job Portals	37	16.2	20.8
Company Website	23	16.2	6.8
Career Guides	13	16.2	–3.2
Campus Recruitment	13	16.2	–3.2
Visits to the Organization	12	16.2	–4.2
Spontaneous Application	9	16.2	–7.2
Career Cell at University	8	16.2	–8.2
Emplyment Office	8	16.2	–8.2
Recruitment Firm	7	16.2	–9.2
Workd of Mouth	7	16.2	–9.2
Head-hunters	5	16.2	–11.2
Advertisements	3	16.2	–13.2
Internship	2	16.2	–14.2
Articles in Media	1	16.2	–15.2
Product information	1	16.2	–15.2
Company Presentations	0	0	0
TV/Radio	0	0	0
Work Forums	0	0	0
Others	0	0	0
Total	276		

The above table indicated that the top five media adopted to work with the present employer were personal contacts, friends at the organization, job portals, company website and career guides. It was also observed that none of the respondents choose company presentation, TV /Radio and work forums.

To identify major motivators for employees to stay

Table 2 indicating the observed and expected mean in descending order of major motivators for employees to stay

Media	N	Minimum	Maximum	Mean	Std. Deviation
Challenging tasks	214	24	75	62.7196	15.73925
Good reference for future career	111	24	75	57.8288	13.57395
International carrer opportunity	156	24	75	51.5962	17.19406
Financial benefits	108	24	75	50.9444	18.10707
Work life balance	26	24	75	49.7692	16.03074
Flexible working hours	119	24	75	46.1513	16.86066
Stock options	10	24	60	46.1	16.65633
Location	186	24	75	46.0323	15.81306
Project based work	135	24	75	45.4667	14.88704
Variety in tasks	97	24	75	45.1546	14.40944
Secured employment	57	24	75	44.6667	16.47111
Leave and vacation policy	16	24	75	43.1875	15.95084
Inspiring colleagues	117	24	75	39.4103	15.1539
Leadership	2	39	39	39	0
Training programs	8	24	60	32.25	13.10125
Overtime pament benefits	4	24	24	24	0
Special perks	4	24	24	24	0
Wages/salary	6	24	24	24	0
Products/services	0	0	0	0	0
Retirement insurance	0	0	0	0	0
Vechicle Loan/Discount facility	0	0	0	0	0
Support staff for domestic help	0	0	0	0	0
Others	0	0	0	0	0
Valid N (Listwise)					

The above table indicated that challenging tasks, good reference for future career, international career opportunity, financial benefits and work life balance formed the top five factors that motivated employees to stay with the organization.

Hypothesis 1: There is no significant difference the observed and expected frequencies in media adopted by IT employees.

Table 3 indicating significant difference in media adopted by IT employees

Media	Observed N	Expected N	Residual
Personal Contacts	79	16.2	62.8
Friends at the Organization	48	16.2	31.8
Job Portals	37	16.2	20.8
Company Website	23	16.2	6.8
Career Guides	13	16.2	–3.2
Campus Recruitment	13	16.2	–3.2
Visits to the Organization	12	16.2	–4.2
Spontaneous Application	9	16.2	–7.2
Career Cell at University	8	16.2	–8.2
Emplyment Office	8	16.2	–8.2
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Head-hunters	5	16.2	–11.2
Advertisements	3	16.2	–13.2
Internship	2	16.2	–14.2
Articles in Media	1	16.2	–15.2
Product information	1	16.2	–15.2
Company Presentations	0	0	0
TV/Radio	0	0	0
Work Forums	0	0	0
Others	0	0	0
Total	276		

Table 3a indicating chi square test of significance

Test Statistics

	Media
Chi-Square	418.290a
df	16
Asymp. Sig.	.000

**0.01 level of significance

The minimum expected cell frequency is 16.2.It was found that there is a significant difference between the observed and expected frequencies at 0.01 level of significance. Therefore null hypothesis was rejected and alternate hypothesis was accepted. That is to say that the method by IT employees were significantly different

It was found that personal contacts, friends at the organization, job portals, company website, career guides and campus recruitment were the top 5 media adopted by employees to get in touch with their employers and these media were significantly different.

If organizations need to increase their branding, then they should ensure that these above five factors are nurtured for increasing visibility and attracting potential applicants to apply to their organizations. Other media include opening up organization for visits, sponsoring career cells at university, advertisements and IT job seekers.

Hypothesis 2: There is no significant difference among the mean ranks that motivate employees to stay with the organization.

To calculate the top 5 factors among the given variables for employees to stay with the organization, the following method was used. Initially, the ranking position was found out by the given ranks by the formula,

Rj: Ranking Position

$$Rj = (Rij-.5) \times 100/Nj$$

where Rij is the rank of the ith tem given by jth index

Nj is the total number of ranks given by jth index.

With the ranking position obtained it was converted into Garette point using Garette conversion table. From this the mean of the scores were obtained and classified from 1 to 5.

To test if there is any significant difference in the means of these variables ANOVA test was performed. The ANOVA test was found to be significant following which the Post Hoc test revealed that there was a significant difference in the means.

Table 4 indicating the observed and expected mean scores in descending order of major motivators for employees to stay

Media	Observed N	Expected N	Residual
Personal Contacts	79	16.2	62.8
Friends at the Organization	48	16.2	31.8
Job Portals	37	16.2	20.8
Company Website	23	16.2	6.8
Career Guides	13	16.2	–3.2
Campus Recruitment	13	16.2	–3.2
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Internship	2	16.2	–14.2
Articles in Media	1	16.2	–15.2
Product information	1	16.2	–15.2
Company Presentations	0	0	0
TV/Radio	0	0	0
Work Forums	0	0	0
Others	0	0	0
Total	276		

Table 4a indicating ANOVA for major motivators for employees to stay

ANOVA

Scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16730.835	4	4182.709	15.911	.000
Within Groups	160362.765	610	262.890		
Total	177093.600	614			

** Significant at the .01 level

It was found that challenging tasks was the highest factors on why employees stay with the organization. This was followed by reference for future career, International opportunity, financial benefits and work life balance.

Table 4.5b indicating Post Hoc multiple comparisons test for significant difference between the top five means

Post_HOC
Multiple comparisions
Dependent variable: Scores

	Groups (I)	Groups (IJ)	Mean Difference (I – J)	Stand. Error	Sig.	95% confidence interval	
						Lower bound	Upper bound
Tukey HSD	Challenging Tasks	Good Reference for future career	4.8908	1.89653	0.076	-0.298	10.0796
		International Career opportunity	11.12347*	1.70694	0	6.4534	15.7936
		Financial Benefits	11.77518*	1.9138	0	6.5391	17.0112
		Work Life Balance	12.95040*	3.36743	0.001	3.7373	22.1635
	Good Reference for future career	Challenging Tasks	-4.8908	1.89653	0.076	-10.0796	0.298
		International Career opportunity	6.23267*	2.01335	0.017	0.7242	11.7411
		Financial Benefits	6.88438*	2.19147	0.015	0.8886	12.8801
		Work Life Balance	8.0596	3.53264	0.152	-1.6055	17.7247
	International Career opportunity	Challenging Tasks	-11.12347*	1.70694	0	-15.7936	-6.4534
		Good Reference for future career	-6.23267*	2.01335	0.017	-11.7411	-0.7242
		Financial Benefits	0.65171	2.02962	0.998	-4.9012	6.2047
		Work Life Balance	1.82692	3.43458	0.984	-7.5699	11.2238
	Financial Benefits	Challenging Tasks	-11.77518*	1.9138	0	-17.0112	-6.5391
		Good Reference for future career	-6.88438*	2.19147	0.015	-12.8801	-0.8886
		International Career opportunity	-0.65171	2.02962	0.998	-6.2047	4.9012
		Work Life Balance	1.17521	3.54194	0.997	-8.5154	10.8658
	Work Life Balance	Challenging Tasks	-12.95040*	3.36743	0.001	-22.1635	-3.7373
		Good Reference for future career	-8.0596	3.53264	0.152	-17.7247	1.6055
		International Career opportunity	-1.82692	3.43458	0.984	-11.2238	7.5699
		Financial Benefits	-1.17521	3.54194	0.997	-10.8658	8.5154
Games-Howell	Challenging Tasks	Good Reference for future career	4.89080*	1.67855	0.032	0.2789	9.5027
		International Career opportunity	11.12347*	1.74719	0	6.3299	15.917
		Financial Benefits	11.77518*	2.04778	0	6.1354	17.415
		Work Life Balance	12.95040*	3.32289	0.004	3.334	22.5668
	Good Reference for future career	Challenging Tasks	-4.89080*	1.67855	0.032	-9.5027	-0.2789
		International Career opportunity	6.23267*	1.88548	0.009	1.0535	11.4118
		Financial Benefits	6.88438*	2.16696	0.015	0.9187	12.8501
		Work Life Balance	8.0596	3.39764	0.148	-1.7259	17.8451
	International Career opportunity	Challenging Tasks	-11.12347*	1.74719	0	-15.917	-6.3299
		Good Reference for future career	-6.23267*	1.88548	0.009	-11.4118	-1.0535
		Financial Benefits	0.65171	2.22056	0.998	-5.4555	6.7589
		Work Life Balance	1.82692	3.43207	0.983	-8.0361	11.6899
	Financial Benefits	Challenging Tasks	-11.77518*	2.04778	0	-17.415	-6.1354
		Good Reference for future career	-6.88438*	2.16696	0.015	-12.8501	-0.9187
		International Career opportunity	-0.65171	2.22056	0.998	-6.7589	5.4555
		Work Life Balance	1.17521	3.59442	0.997	-9.0704	11.4208
	Work Life Balance	Challenging Tasks	-12.95040*	3.32289	0.004	-22.5668	-3.334
		Good Reference for future career	-8.0596	3.39764	0.148	-17.8451	1.7259
		International Career opportunity	-1.82692	3.43207	0.983	-11.6899	8.0361
		Financial Benefits	-1.17521	3.59442	0.997	-11.4208	9.0704

It was found that the mean ranks for the top 5 factors for employees to stay with the organization differed significantly. Therefore null hypothesis is rejected and alternate hypothesis is accepted. It was found that factors including work life balance, good reference for future career, international career opportunity and financial benefits were major influencers in an employee's commitment to stay with the organization.

If organizations need to ensure that the employee doesn't think of moving out, they should ensure that these five factors are handled thoroughly during an employee's stay in the organization. It was also observed that Products/ Services, Retirement benefits, vehicle loans/ discount facility, support staff for domestic help absolutely had no impact, therefore companies should not focus on these issues as these may not yield any results.

Discussion and Implications

The analysis of data reveals that there was a significant difference between the media employees choose, willingness to stay and perception of trust. In the light of this investigation the organizational attractiveness is one of the important factors to influence an employee to choose over another, because organizations have to adopt certain practices to keep their prestigious position in the employer market. Based on the investigation we can observe that the respondents are more inclined to those factors which have general attractiveness like, compensation benefits, challenging tasks, reference for future career, international opportunity, financial benefits and work life balance for their ideal working environment.

IT organizations should take up the initiative in improving the employer employee relationship. This can be done by designing and providing effective training to their employees. This will help enhance the skills of the employees with regard to self - awareness. Self - awareness forms the most critical element of employer branding as we have observed form the study that personal contacts and friends at the organization have influenced a person to choose an organization over the other. Therefore employer handles self-awareness programs to ensure that an employee is committed. High self-awareness helps an individual to monitor the actions and try to rectify it if required, self-awareness guides an individual to fine tune the job performance style and become more acceptable and socially networked. Further it also helps employees to facilitate performance by directing them toward constructive activities and improving personal performance. Any person highly capable in this dimension would be able to encourage him or

herself to do better continuously and direct his or her emotions in positive and productive directions.

Work related a factor like too challenging tasks were interfering with personal life has been highest for IT professionals. It is suggested that IT organizations should offer employee assistance programs, where employees can seek expert advice for a better well-being and enjoy a happy personal life. Further IT organizations should also come up with better employee engagement activities and better family friendly programs. These initiatives will create a feeling in the employees that the organization cares and supports for the employees well-being. This will also increase the emotional attachment of the employees towards their organization.

It has been observed from the study that training program is critical in retaining an employee. IT organizations should clearly identify the modules which are important in career development and periodically enhance the employee's skill sets. By doing this IT organizations will help improve the relationship across management levels leading to a better quality of workforce and longer commitment.

Factors' including challenging tasks indicates that an employee's task has to be identified, defines and effectively assigned so that his performance and efficiency increases. IT organizations should clearly define the roles and responsibilities for each every employee so that there is a clear objective laid down by the organization as to who is accountable for what and no does extra work. Counselling personally can help organisations to ensure that the stress levels of the employee are balanced.

Among the many things the average professional deals with daily: getting ahead at work; helping the kids with their homework; driving the school carpool; spending quality time with their significant other; caring for elderly parents; dealing with chores in the home; trying to get in just a few minutes to catch up with friends. Life can feel like a constant battle between professional and personal lives, especially now, with the economic distress making our lives more challenging than ever in so many ways. It was observed that majority of employees believed in a work life balance. IT organizations can improve the work - life balance of their employees by encouraging the concept of job sharing. Employers can engage in Job audit were jobs are evaluated based on the efficiency, turnaround time and personal commitment, then these jobs are allocated based on the need of the hour. This helps in better sharing of job, resulting in employee' work life balance.

IT professionals need to understand that the job satisfaction, pay and benefits, satisfaction with management, equal opportunities in the organization influence employee engagement. But the highest significant driver is the challenging tasks, which indicates that if an employee has no intention to stay with the organization even after being provided with all the benefits, such an employee is inconsistent with the values and beliefs of the organization, he is a job-hopper who may spread negative vibrations of the company.

In the current scenario, in IT industries it is very common to find companies which give huge referral bonuses. Therefore it should not be surprising to find employees voluntarily helping the organization in terms of recruiting new hires as employees are directly benefited monetarily.

An employer brand isn't necessarily just a marketing tool to get an employee working for an organization; an employment brand is to express an employee value proposition. Organizations don't have to try to create an employment brand message that speaks to four generations, but it should think about who the company is and what company is offering as a value proposition. Creating an authentic brand and increasing employee loyalty starts by having an understanding of what organizations culture really is and what it is not. In a complex recruiting and retention environment, employer branding can be a very effective tool to attract and retain the right people to any company and repel the ones that just don't deserve to be inducted.

Limitations of the Study

Several factors account for less than universal acceptance of this investigation. Measuring payoffs is difficult. The result of this present investigation cannot always be measured in direct returns to the organizations. It is impossible that the researcher can conduct a study and then point to a specific decrease in attrition rates, or increase in acceptance as a best employer, etc. the present investigation can produce exactly what has been required but the results may not improve decisions because the companies would have defined their policies and practices that are tailor made to their environment.

The sample was limited to IT organizations. The study was conducted under the assumption that the information given by the respondents was authentic. The outcome of the study cannot be generalized to other industries or sector as the investigation was conducted on IT employees only. The study is chiefly concentrated only on the IT sector. Hence it becomes difficult to judge the importance of employer branding, willingness to stay and employee's perception of trust to be common across industry verticals. Time factor was a major challenge.

Conclusion

This study pinpoints certain factors of employer branding that gives an organization a competitive advantage. Employer branding is a tool to attract, hire, and retain the "right fit it also has an impact on shareholder value, creating positive human capital practices, contribute to bottom-line. A company's employer brand is reflected in the actions and behaviours of leaders and is affected by company policies, procedures, and practices and the same when well-planned and implemented results in profitability of organizations. There is a need for IT organizations for creating a satisfaction in minds of employees but there is an urgent need of creating this positivism in the minds of external customers and stakeholders. The created image has to be monitored and sustained in such a way that it helps in increasing profits and would create belongingness, pride, self-actualization and true commitment in true words and spirit.

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Financial Ratios, Discriminant Analysis and the Prediction of Corporate Failure

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Abstract

This paper presents some empirical results of predicting corporate failure by using 15 financial ratios. It applied a multivariate technique to Nepalese companies to ascertain its ability to discriminate failure and non-failure companies over 2006 to 2010 period. This study develops a failure prediction model for Nepalese companies. The results show good performance with a highly correct categorization factuality rate of 88 percent. Two ratios were determined significant out of 15 financial ratios utilized in this analysis to discriminate among failed and non-failed companies. The significant variables are retained earnings to total asset (RETA) and net profit to total asset (NPTA).

Keywords: Prediction Model, Discriminant Analysis, Ratio, Cash Flow, Sales

Introduction

It is generally recognized that company financial statements provide information on a company's performance, stability and indication of future commercial and financial prospects. Analysis and interpretation of financial statements using various ratios and studies of trends do provide a shareholder, creditor, banker or potential investor valuable information about a company's financial status, its solvency position, and its borrowing power and whether the company is a suitable investment for shareholders.

Having the ability to predict company failures is of the utmost importance. Managers trained in using selected and proven financial ratios as analysis tools and being aware of bankruptcy prediction models can take corrective and preventive measures to prevent failure in their own companies.

Individuals as well as institutional investors and fund managers who manage large investment portfolios can improve their performances if they can distinguish the weak companies from the healthy ones. Such knowledge and skills in ratio analysis and bankruptcy prediction models can be very useful to the statutory auditors who are required by law to determine a company's ability to continue its existence as a going concern.

An economic downturn like the 1997-98 Asian financial crisis resulted in a sharp decline in the value of stock prices that dampened business confidence and increased company bankruptcies. During normal times, however, business failures are more likely to be caused by falling profits or losses for several years in succession, excessive debts, insufficient working capital, managerial errors and misjudgments, though management frauds have surfaced more frequently and involving large multinationals recently. Over the years, various analytical techniques such as multiple discriminant analysis, logistic regression, linear probability models, moral hazard and artificial neural network models, have been used to predict potential company failures and these previous studies have found that they are effective and reasonably accurate though some of the claims made may seem not as credible when tested over time and with different samples and populations and in different sectors. However, financial ratios and bankruptcy prediction models are useful and helpful as attested by the continuing interests and continuing usage of them by a wide range of managers, analysts and other professionals in commerce, finance and industry.

Companies in Nepal do not have as long a history as those in the Western countries and their sizes are, for most of the companies, not as large. In addition, their access to funds and capital are not as easily available compared to the more developed countries. The development of the capital market in Nepal is still at its early stages compared to advanced markets in the West. Although the government has always been stressing the importance of good corporate governance, Nepal has not been immune to corporate collapses and scandals. Therefore, the selection of financial ratios and the predictive models and their statistical techniques used in researches done elsewhere may not be as applicable or as reliable and accurate as when they are applied to the Nepalese companies.

Many investigations and studies on company failure predictions have been carried out in developed countries such as by Altman (1968), Deakin (1972) and Ohlson (1990) in the US, Green (1978), Wood & Piesse (1987) and Inman (1991) in the UK, and Gepp & Kumar (2008), Ganelasingam & Kumar, (2001)

and Cybinski (2001) and Jones & Hensher (2004) in Australia. These countries have longer trading and commercial histories with more stringent company law provisions and stronger law enforcements and penalties.

Brief Review of Previous Studies

Green (1978) reported that the earliest studies on the financial health of companies were univariate in nature started with works by Fitz Patrick and Winakor & Smith in the 1930s and Mervin in 1942. The most popular pioneer univariate model was postulated by Beaver (1966) and it started many other company failure prediction analyses using other statistical techniques.

The univariate approach was criticized for various weaknesses. Altman (1968) stated that one of the main shortcomings of using the univariate method is that the ratios are not allowed to interact with one another as each ratio is examined separately, in isolation from the other ratios. Morris (1998) illustrated with the example that while low profitability may be one signal of financial distress, it may not necessarily be fatal if a business has a strong liquidity position, and likewise, a company that is profitable but which has low reserves of liquid assets is potentially vulnerable if there should be an unexpected setback. Thus using a single variable to determine a financial distress situation is risky.

From some of the shortcomings of univariate analyses in evaluating ratios individually and independently of each other, it seems obvious that there may be advantages in developing models which simultaneously examine a number of key characteristics, such as profitability, short and long term liquidity, gearing and so on. In attempts to formulate models that take into account the simultaneous interaction between variables, researchers have devised, and come out with newer models mostly based on multiple regression statistical techniques such as multiple discriminant analysis by Altman (1968) and Koh & Killough (1990) and logistic regression by Ohlson (1980), Gilbert, Menon & Schwartz (1990) and Lin & Piesse (2004). Another popular modeling technique is artificial neural network which uses a non-linear approach and gives a computer system an amazing capacity to actually learn from input data.

Ohlson (1980) used a logit model to predict corporate failure using data for US firms comprising 105 bankrupt and 2058 non-bankrupt firms. His findings resembled than four factors derived from financial statement were statistically significant for purposes of assessing the probability of failure: i)

size, ii) the financial structure of leverage; iii) some performance measures; iv) some measures for current liquidity.

Altman et al. (1994) reported the use of neural network in identification of distressed business by the Italian central bank. Using over 1,000 sampled firms with 10 financial ratios as independent variables, they found that the classification of neural networks was very close to that achieved by discriminant analysis. They concluded that the neural network is not a clearly dominant mathematical technique compared to traditional statistical techniques.

Begley et al. (1995) incorporated the time "bias" factor into the classic business failure prediction model. Using Altman (1968) and Ohlson's (1980) models to a matched sample of failed and non-failed firms from 1980's, they found that the predictive accuracy of Altman's model declined when applied against the 1980's data. The findings explained the importance of incorporating the time factor in the traditional failure prediction models.

Campbell (1996) constructed a multivariate prediction model that estimates the probability of bankruptcy reorganization for closely held firms. Six variables were used in developing the hypotheses and five were significant in distinguishing closely held firms that reorganize from those that liquidate. The five factors were firm size, asset profitability, the number of secured creditors, the presence of free assets, and the number of under-secured secured creditors. The prediction model correctly classified 78.5% of the sampled firms. This model is used as a decision aid when forming an expert opinion regarding a debtor's likelihood of rehabilitation.

Research Design and Methodology

The sample consisted of both failed and non-failed listed companies in the NEPSE. The failed companies are those companies which have been suffering from losses continuously from last five years. A total of four failed companies were identified from the Nepal Stock Exchange (NEPSE). Companies were matched if they belonged to the same industry group and have the closest asset size but unfortunately they have not been matched because of small numbers of listed companies in Nepal. It is quite consistent and follows the Ohlson (1980) model of selecting companies for the investigations. A one to one procedure is not consistent with the previous studies documented in Beaver (1966), Altman (1968) and Blum (1974) and is an acceptable method in failure prediction studies. Financial data for both groups were collected from the annual reports in the SEBON Nepal and concerned companies office.

Selection of Predictor Variables

Karels & Prakesh (1987) suggested a careful selection of financial ratios to be used in the development of a failure prediction model since the choice of ratios can affect the accuracy prediction of the model. The choice of ratios may have to be different to the different industries to predict eh corporate failure of the firms. The ratios off rateil and manufacturing industries are their extremes in their characteristics and that companies in other industries seem to fall in-between these extremes end (Gombola & Ketz, 1983).

Koh & Killough (1986) revealed that it is essential to have a large numbers of ratios to predict business failures and all that is required to select dominant ratios derived from a large set of related ratios. It could simply help to enhance the higher accuracy of prediction. The research has utilized fifteen financial ratios which have been selected on the grounds of popularity of their usages in the previous research. No attempt has been made to develop exotic ratios; the important criterion for ratio selection is simplicity. The ratios used in this research are explained in Table 1.

Table 1: The Financial Ratios Utilized

Financial Ratios	**Bases**
Net profit to net worth (NP/TA)	P, D
Net worth to total debt (NW/TL)	P
Net income to total assets (NP/TA)	B, O, Y-M-M
Cash flow to total debt (CF/TL)	B
Working capital to total assets (WC/TA)	A
Total debt to total assets (TL/TA)	B, O
Retained earnings to total assets (RE/TA)	A, B, D
Current assets to current liabilities (CA/CL)	A-H-N, B-I
EBIT to total assets (EBIT/TA)	A, G, K
Net worth to share capital (NW/SC)	A
Cash flow to current liabilities (CF/CL)	A, B, C, G
Net sales to total assets (NS/TA)	A, A-H-N, M
Cash flow to total liabilities (CF/TL)	A, O
Current assets to net sales (CA/NS)	D
Cash flow to net sales (CF/NS)	D, K

A – Altman (1968)
C- Casey (1985)
G- Gilbert (1990)
B-Beaver (1966)
K-Karels (1987)
M-Mohamed (2001)
O-Ohlson (1980)
D-Deakin (1972)
P-Patrick (1932)
A-H-N-Altman, Haldeman & Narayanan (1977)
B-I-Bunyaminu & Issac (2012)
Y-M-M- Yap, Munuswamy & Mohamed (2012)

Models and Methodologies

Multiple Discriminant Analysis (MDA)

The study used Multiple Discriminant Analaysis (MDA) to predict failed and non-failed companies. Discriminant scoring models based on MDA is a multivariate technique that analyzes a set of variables to maximize between group variance minimizing within group variance with respect to the bankrupt or non-bankrupt firms. This is a sequential process in which the analyst includes or excludes variables on various statistical criteria. More formally, we have:

$$Z = \beta_0 + \beta_1 X_{1jt} + \beta_2 X_{2jt} + \ldots\ldots\ldots + \beta_n X_{njt}$$

Where,

Z_i = Discriminant function for the hold out sample

$X_1 \ldots X_n$ = Firms characteristics i.e. financial variables where n is the number of firm characteristics

$\beta_1 \ldots \beta_n$ = coefficient/ weights in the discriminant function

If $Z_i > c$, then the firm is classified as non-bankrupt.

If $Z_i < c$, then the firm is classified as bankrupt.

The β's and the cut-off score 'c' are all determined from performing the determinant function estimation based on a stepwise approach is adopted to select the best discriminating variables that could predict failed and non-failed companies. This model would then be compared to the logit analysis model to examine which among the two could provide a higher accuracy in predicting financially failed companies. The logit prediction model is adopted from Ohlson (1980), Gujarati (1995), and Joo and Jinn (2000).

Binary Logistic Regression (Logit) Model

The logit model employed in this study combines several characteristics into a probability score for each company, which indicates the 'failure probability' or the 'vulnerability to failure'. This study used logit model adopted from Ohlson (1980), Tucker (1996), and Abdullah et al. (2008).

$$Z_i = \beta' X_{i+} u_i \quad \ldots (1)$$

Where,

Z_i is a Discriminat score for economy

β' is the weight (weight) of variables

X_i is company's financial ratios

U_i is an error

Z ranges from - ∞ to + ∞

The probability and likelihood function for the non-failed can be defined as follows:

$$P_i = E(Y = 2/ X_i) = 1/1 + e^{-(\beta' X_i + U_i)} \quad \ldots (2)$$

For ease of expression, it is written as

$$P_i = 1/(1 + e^{-Z_i})$$

Where $Z_i = \beta' X_{i+} u_i$

Equation (2) represents what is known as the (cumulative) logistic regression function. For the application of the logit prediction model, the weights of each financial ratio was estimated in equation (1) using the financial ratios of listed companies. If Pi represents the probability of non-failed companies which is given in the equation (2), then (1- P_i) would be the probability of failed companies. Hence,

$$1-P_i = 1 - 1/ (1 + e^{-Z_i})$$

Optimal β′ (weights) can be estimated where the likelihood value is maximized. The probability of distressed is obtained by substituting into the cumulative probability function. A company is classified as distressed if the calculated probability from the logit is more than 0.5, otherwise it would be non-failed.

Similar to the discriminant analysis, a forward stepwise method is adopted in logistic regression. This procedure would enable the predictor variables to be entered based upon their contribution to the likelihood ratio statistics. Therefore, variables that do not contribute significantly to the statistics are not entered by the procedures. Soo *et al*. (2001) stressed that the lack of theoretical basis in selecting the independent variables was the main reason why a stepwise procedure is needed. A similar argument was made by Menard (1995) as he stated that stepwise methods were used when neither the theory nor knowledge correlates to the phenomenon. In addition, the used of a stepwise procedure would at least reduce multicollinearity problems which make it difficult to make any statistical inferences.

Conclusions

Multivariate Discrminant Function and Application of Failure

Financial ratios give an indication of financial strength of a company. The limitations of ratio analysis arise from the fact that the methodology is basically univariate; that is, each ratio is examined in isolation. The combined effects of several ratios are based solely on the judgments of financial analyst. Therefore, it is necessary to combine different ratios into a meaningful predictive model to overcome these shortcomings. The discriminant analysis and logit models have been used to construct an index that allows classification of an observation into one of the several a priori groupings.

MDA has been used to determine the most predictive ratios predicting corporate failure in the Nepalese context using fifteen ratios. It simply analyzes and compares the mean values of financial ratios of failed and non-failed companies.

Table 2: Comparing Over Time the Financial Ratios of Failed and Non-failed Companies

Ratios	2010	2009	2008	2007	2006	All
WCTA	-.7060	-.7600	-.7300	-.7580	-.6440	-0.72
	(0.0258)	(0.048)	(0.0630)	(-0.0290)	(.0380)	(0.03)
NSTA	.8640	.6840	.3300	.3760	.5320	0.56
	(0.8996)	(0.8280)	(0.7580)	(0.8040)	(0.5930)	(0.78)
RETA	-1.6880	-1.6180	-1.6400	-1.2500	-1.0080	-1.44
	(0.1629)	(0.1670)	(0.1010)	(0.680)	(0.1180)	(0.12)
EBITTA	.0380	-.0100	.1960	.2400	.3880	0.17
	(0.1512)	(0.1320)	(0.1180)	(0.940)	(0.0820)	(0.11)
NPTA	-.030	-.084	-.118	-.202	-.086	-0.10
	(0.121)	(0.107)	(0.099)	(0.085)	(0.068)	(0.10)
TDTA	1.1820	1.2240	1.0860	1.1880	1.0900	1.15
	(0.4894)	(0.464)	(0.5070)	(0.5750)	(0.5590)	(0.52)
CFTA	-.0040	-.0480	-.0820	-.1720	-.0540	-0.07
	(0.1433)	(0.1300)	(0.1230)	(0.1090)	(0.1020)	(0.12)
CFTL	.0180	-.0380	-.1100	-.2260	-.0560	-0.08
	(1.2226)	(0.4970)	(0.3380)	(0.3700)	(0.2910)	(0.54)
NWTL	.1960	.1180	-.5560	.7160	.5280	0.20
	(5.1119)	(2.3540)	(1.6950)	(1.8090)	(1.8480)	(2.56)
NPNW	-.0400	-.2500	-.0180	.0180	-.1580	-0.09
	(0.2135)	(0.1950)	(0.2290)	(0.2160)	(0.1700)	(0.20)
NWSC	-2.3440	-2.5120	-.2940	-.0140	.6200	-0.91
	(3.2539)	(2.8310)	(2.1160)	(1.9180)	(1.9770)	(2.42)

CFCL	.0180	-.0120	-.1100	-.2300	-.0560	-0.08
	(13.6994)	(12.845)	(0.610)	(2.228)	(1.082)	(6.09)
CACL	.5980	.3760	1.7240	2.1060	1.2520	1.21
	(21.5856)	(16.038)	(1.468)	(1.690)	(1.536)	(8.46)
CANS	.5440	153.6240	4.9350	89.034	27.446	134.00
	(0.7956)	(0.7950)	(0.790)	(0.6850)	(10.325)	(2.38)
CFNS	-.0840	-7.7040	-20.4340	-11.416	-5.9280	134.00
	(0.2647)	(0.2740)	(0.2780)	(0.2080)	(0.3250)	(0.27)

(The values in upper case show the mean values of failed companies and parentheses reveal the mean values of non-failed companies of fifteen ratios.)

A profile analysis of the data supports the hypotheses regarding the signs. Table 2 is a comparison over time of the financial ratios of the failed and non-failed companies. From the table, a number of observations can be made. Debt ratios have been identified to be 1.15 for failed companies and 0.52 for non-failed companies. It reveals that failed companies have higher debt ratios and lower for non-failed companies. The exception is with regard to EBIT/TA ratios where, surprisingly, failed companies have higher average values (0.17) than non-failed companies (0.11).

The second aspect of the results in Table 2 is the steady deterioration over time in the ratios of failed companies in the comparison with those of non-failed companies. Similarly, retained earnings ratios of failed companies (–1.44) have been obtained to be lower than non-failed companies (0.12).

Though it is essentially a multivariate analysis, the discriminate analysis begins with an analysis of variance to assess the differences between means of financial ratios of companies that have and those have not sought for court protection. Table 3 below shows the results from the univariate analysis. It should be noted that because there are two groups, the t-ratios could be calculated as square roots of the respective F-ratios. From the results in table 3, it is revealed that there is significant difference between ratios of failed and non-failed companies. Eleven ratios out of fifteen ratios undertaken for investigations have been observed to be significant. They are Working capital to total assets, Retained earnings to total assets, Net profit to total assets, Total debt to total assets, Cash flow to net sales, Current assets to current liabilities, Net worth to share capital, Net profit to net worth, Net worth to total liabilities, Cash flow to total liabilities and Cash flow to total assets.

Table 3: Tests of Equality of Group Means

Independent Variables	Wilks' Lambda	F-ratio	Sig.
Working capital to total assets (WCTA)	0.776	20.789	0.000*
Net sales to total assets (NSTA)	0.981	1.415	0.238
Retained earnings to total assets (RETA)	0.552	58.386	0.000*
Earnings before interest and tax to total assets (EBITTA)	0.991	0.670	0.416
Net profit to total assets (NPTA)	0.614	45.182	0.000*
Total debt to total assets (TDTA)	0.882	9.603	0.003*
Cash flow to total assets (CFTA)	0.612	45.582	0.000*
Cash flow to total liabilities (CFTL)	0.934	5.063	0.028*
Net worth to total liabilities (NWTL)	0.933	5.184	0.026*
Net profit to net worth (NPNW)	0.814	16.478	0.000*
Net worth to share capital (NWSC)	0.752	23.702	0.000*
Cash flow to current liabilities (CFCL)	0.981	1.409	0.239
Current assets to current liabilities (CACL)	0.986	1.021	0.316
Current assets to net sales (CANS)	0.937	4.844	0.031*
Cash flow to net sales (CFNS)	0.901	7.894	0.006*

*Significant at 5%

The multivariate discriminant analysis has been accurate to 88 percent in discriminating failed and non-failed companies on the grounds of fifteen financial ratios used in the study out of fifteen companies taken under investigation. Failed and non-failed companies have been correctly classified as failed and non-failed by 64 percent and 100 percent respectively as per Table 4. The accuracy of multivariate discriminant analysis classification has been improved using stepwise procedures of multivariate discriminant analysis which has decreased the numbers of variables removing step by step method. Thus, the step wise study has developed the following multivariate discriminate function (Z-function) for the prediction of failure. It has been stated as follows:

Table 4: Discriminant Analysis Result

Variables	Wald	Sig.
Net profit to total assets	9.2371	0.000*
Retained earnings to total assets	7.6243	0.000*
Percent correctly predicted		
Failed		64%
Non-failed		100%
Overall		88%

The Multivariate Discriminant Model developed has been stated as:

$$Z = 0.183 + 0.874 X1 + 4.32 X2$$

Where,

Z = Discriminating score

X1 = Retained earnings to total assets

X2 = Net profit to total assets

This model seems to be quite useful in predicting corporate failure. The above model provides the z-scores of fifteen companies which result should be investigated to bring a general model for the application. On the basis of misclassification in the initial sample, it can be concluded that all companies having z-score greater than 0.02 are entitled to be non-failed companies where as companies having their z-score below -0.32 fall in the failed groups of companies. The region between -0.32 to 0.02 is known as grey region which indicates that all companies falling in this region are indeterminate to discriminate healthy or sick companies. They may come out of their failure provided that proper care is taken by the concerned authorities of the companies in the right time. The region is declared to be grey region simply because of susceptibility to error classification based on Altman (1968).

Stepwise Logistic Regression Analysis of Failed and Non-Failed Companies

This table presents the logistic regression results of failed and non-failed fifteen companies of fifteen variables obtained from stepwise regression procedures at maxium iteration 20 with 0.50 as cut-off point. The table reveals the coefficients of each variables and their corresponding standard error, wald and significance level.

Table 5: Logit Results (Stepwise Method)

Variables	***β***	**S.E.**	**Wald**	**Sig.**
Net profit to total assets (NPTA)	40.132	14.261	7.919	0.005
Net worth to total assets (NWSC)	1.313	0.497	6.972	0.008
Constant	-0.767	0.770	0.992	0.319

The results in Table 5 shows that two ratios out of fifteen ratios have only been found to be significant at 5% level of significance to discriminate failed and non-failed companies using stepwise logistic regression analysis. Therefore, the new logistic regression equation can be given as below:

Probability of failure (P) = $1/\ 1 + \exp^{-(-0.767+40.132NP/TA+1.313NW/SC)}$

Table 6: Overall Classification Accuracy

Observed Group	Predicted group		
	Failed	**Non-failed**	**Percentage correct**
Failed	21	4	84.0
Non-failed	1	49	98.0
Overall percentage		93.2%	
Type I		16%	
Type II		2%	

Nagelkerke R Square = 79.2%

Table 6 shows that the overall accuracy of failed and non-failed companies' prediction has been identified to be 84 percent and 98 percent respectively based on logit stepwise regression model. The type I and type II error s have been seemed to be 16 percent and 2 percent respectively. The nelkereke R Square has been obtained to be 99.2 percent.

Discussions

The results obtained from this study showed that the logit model has been found to be better than multiple disciminant analysis model in predicting corporate failure. The logit model predicts 93.2 percent accurate in predicting failures whereas multiple discriminant analysis model has been obtained to be 88 percent accurate in predicting corporate failure. In addition, two ratios namely net profit to total assets and retained earnings to total assets were found to have significant discriminating power in the multiple discriminant analysis model. To put the discussion in context, as summary is given below of the mean values of the significant ratios.

Table 7: Mean Values of Significant Financial Ratios

Variables	Non-failed	Failed
Net profit to total assets	0.0962	-0.104
Retained earnings to total assets	0.1232	-1.4408

Table 7 shows that non-failed companies have positive net profit to total assets of 0.0962 whereas failed companies have negative ratio of -0.104. The retained earnings to total assets of non-failed companies have been observed to be 0.1232 and failed companies have negative ratios of -1.4408.This finding appears to reecho those of Altman (1968), Beaver (1966) and Ewert (1968), who reported that net profit to total assets and retained earnings to total

assets ratios have significant predictive power to discriminate failed and non-failed companies. Thus, it can be concluded that net profit to total assets and retained earnings to total assets ratios are key important financial ratios in predicting corporate failures of the companies in Nepalese context. The implication is that failed companies should pounder over net profit to total assets and retained earnings to total assets ratios in order to ensure the sound financial health of companies on one hand and to prevent possible failures of the firms on the other hand. To guarantee sustainable growth, prosperity and proper development of industries, the government should control companies from being bankrupt through the implementation of right kind and quality of directive enforcement in the country emphasizing on net profit to total assets ratios and retained earnings to total assets ratios.

Overall, the results of this study suggest that to reduce the prospect of failure, Nepalese companies should strive to ensure the sound profitable conditions along with better retained earnings. Thus, Nepalese companies should strive to generate profit out of its assets employed in the business in order to be successful.

The results of this study and the implications derived there from should, however, be taken against the backdrop of their limitations-the sample is small owing to the small numbers of companies that went into bankruptcy or applied for court protection in Nepal. Further research

is required to make use of large numbers of sample when it is available so that the results could be more generalisable.

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Implementation of Balanced Scorecard for the EBINA General Hospital

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Abstract

At the general hospital, two aspects of BSC study are included. The first study is how to cascade downward the strategy into business management in the hospital. The second one is to utilize BSC as an alternative to the daily management tool for nursing department. Simons suggested classifying four strategic systems and controlling them by lever. When the intended plan is unsuccessful, all managers should build the interactive control system for realizing emergent strategies. There is no answer as to how to combine control systems to make a company's suitable system. It depends on the position of lifecycle or the manner of strategic decision. This paper discusses a method to apply Balanced Scorecard system in a case study of a hospital and whether this system could bear functions of two controlling systems.

Keywords: control lever, BSC, MBO, cascade downward, EBINA General Hospital (EGH), strategic map.

Disclaimer

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Introduction

There are various ways of thinking about and classifying business strategies. Mintzberg et al. (1998) classified them according to ten strategy schools and provided five definitions. Simons (1995) also proposed multiple strategies into dividing them four, suggesting control-leverto manage these strategies. These are belief systems, boundary systems, diagnostic control system, and interactive control systems. Especially it is said effective to build a diagnostic control system for the intention of future strategic plan. The strategic research was defined as the direction of a plan in future. Also it is better to build interactive control systems and realize emergent strategies by all managers bringing their ideas if the intended plan could not be succeed.

There is no correct answer to combine these control systems at a certain company. Adopted systems depend on the location of the company within its lifecycle and the strategy adopted. In general, BSC (balanced score card) has a function as the interactive control system, but in some cases, it uses a function as a diagnostic control system (Simons, 1999).

In this paper, we discuss the strategic cascade, that is, how to put business strategy into a business plan. It becomes hard to implement the strategy effectively if it is difficult to cascade downward. To be specific, we introduce a case study involving BSC to be utilized both as strategic planning and business planning in the downward cascade. In this case, BSC utilizes two kinds of control levers in the same organization. These are interactive control system for the hospital management, and diagnostic control system for the nursing operation.

Issues Relating to BSC

BSC (balanced scorecard) was proposed as a strategic management system(Kaplan and Norton, 2001). If the strategy plan corresponds to the operational activities, it becomes to use effectively. Therefore, strategy and business activities are closely related. Two aspects of the BSC study relating to strategy and business management have been developed. One research is to cascade downward the BSC into operational management, and the other is to utilize BSC as an operational management.

The first research field was related to the question of how to cascade downward the strategy into business management. It included the linkage of BSC and Management by Objectives(Ito, 2001), BSC and *Hoshin* management (Yamada and Ito, 2005), BSC and dashboard (Lorence, 2010), BSC and the MB

(Malcolm Baldrige) Award, and so on. It is a serious problem to link it with the present business management tool.

The second research field was to utilize BSC as an alternative to the daily management tool. Hansen and Moritsen (2005) introduced four cases in the use of BSC. These are applications of BSC to daily management.

- The case of communication tool among departments,
- The application of personal MBO available to be taken as non- financial indicators,
- The case of promoting business standards among similar departments,
- The case of applying BSC to improve business processes.

This paper addressed the first research field of BSC cascading downward into daily management and introducing action research at a hospital BSC and cascading downward to nursing department.

Relationship and difference between Strategy and Operation

In general, management activities in industry classify strategic formulation, management control, and task control(Anthony and Govindarajan, 2007). While strategic formulation is a decision process for a new strategy, management control is an implementation process for strategy. On the other hand, task control is to implement a certain job effectively and efficiently. BSC is said to be the strategic management system to execute strategic formulation and implementation by using strategic map and scorecard (Sakurai, 2008). Strategic planning can be visualized using strategic maps. Also visualized strategy can be measured and controlled by the BSC. Such BSC functions of strategic formulation and management control have been organized by Anthony and Govindarajan (2007).

Whereas strategic formulation and implementation is made using BSC, it is difficult to implement the strategy without cascading downward to the local operational management. By such reasoning, Kaplan and Norton (2008)suggested to use a closed-loop management system without classification of strategy and operation. Another reason is thought to be an essential activity to cascade downward the strategy into operational planning. A closed-loop management system is suggested to have management integration of a PDCA cycle for strategy and implementation.

Operations are the daily local activities that allow the strategy to cascade downward. Operations management is an implementation of daily local management as production planning, policy management, and MBO. If the strategy plans does not correspond to the operational plan, it becomes useless.

Therefore operational planning includes measures of both routinely in operation and strategy. Strategy can be realized if operational planning can be achieved, but operational management has local daily management as an inherent function. Operations management is difficult to be implemented effectively within the system.

As mentioned above, the aims of management control can be understood differently between strategy and operations. Strategic management consists of strategic planning and its implementation. Operations management consists of the control or local and formal daily activities and the control of cascaded activities for strategies.

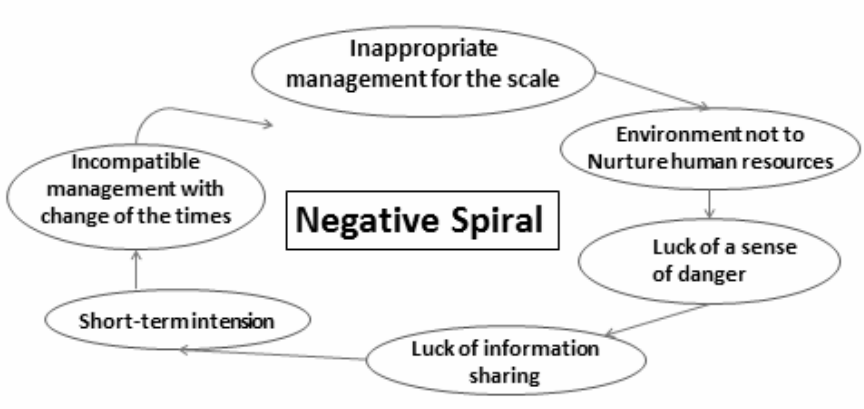
BSC case at the EBINA General Hospital

EBINA General Hospital (EGH) is a member of JMA (Japan Medical Alliances), and other facilities include EBINA Medical Plaza, Long-Term Care Health Facility, and East SAITAMA General Hospital, and so on. The EGH is an acute care hospital located at the center of KANAGAWA prefecture, and the hospital has 469 beds, 23 clinical departments, 820 staff members, and emergency medical care in charge. In Japan, medical organizations introducing BSC are increasing little by little. In this section, the three-year case of BSC at EBINA General Hospital will be introduced. The research approach is an action research. Ito attended all meetings, training sessions and reviews related to BSC, and made introductory plans and schedules by contacting the Hospital Strategic Planning Office closely. Here we will clarify a part of the results, financial results at the hospital before and after introduction of BSC, present an introductory process, and illustrate the hospital's strategic map and scorecard.

Issues before introduction of BSC

Until 2009, the hospital management was ill reputed to doctors as well as patients. As shown in Figure 1, inappropriate management led to reduce the hospital's customers. Especially short term planning tends to recover patients.

Figure 1: Hospital Management until 2009



Source: Ebina General Hospital

Table 1 shows the comparison between the EBINA's BSC and other hospitals' BSC. Target of BSC was stretched out to the whole of hospital and five years' period plan. At the hospital, BSC study was to cascade downward the strategy into business management. It is important to link BSC with MBO (management by objectives) and *Hoshin*/policy management. While nursing department, BSC is thought as an alternative to the daily management tool.

Table 1: Comparison between Ebina's BSC and other hospitals' BSC

	Ebina General Hospital	**Hospital in general**
Aim of BSC	Communication tool and Strategy's execution	Communication tool
Target of BSC	Whole of Hospital	Nursing Department
Perios of BSC	5 Years	One year
Relationship between BSC and Commitee	Intimacy	Non
Control Type	Diagonistic and interactive control system	Diagonstic Control System

Source: Ebina General Hospital

Process of the BSC introduction

On Dec. 2009, Ito was sounded out on the support of BSC from Mr. Takano, a member of JMA corporate planning office. In Feb. 2010, Ito had a pre-meeting with Uchiyama, a director of EGH (hospital). He worried about the introduction of TQM as well as BSC. He thought the burden of imposing BSC

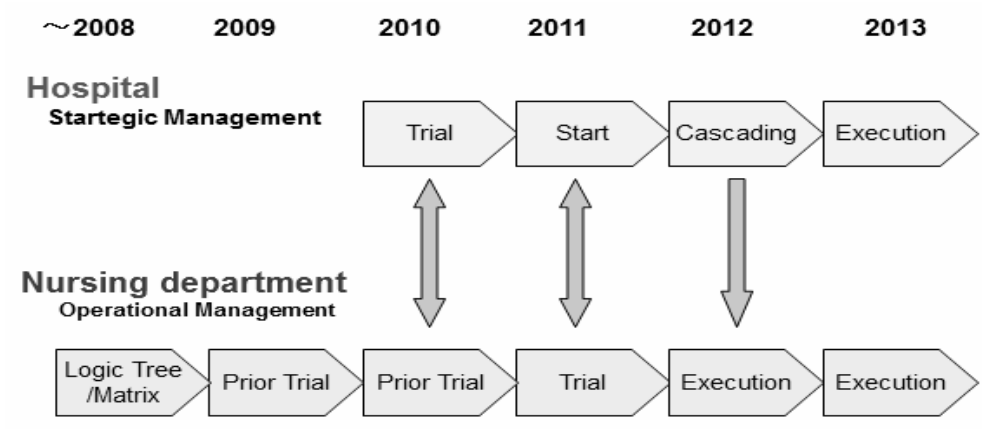
on the hospital staff. Ito recommended BSC to him, and in conclusion, EGH admitted to introduce BSC on a trial basis after making a lecture to the board chairman on the purpose of the introduction of BSC, the aim for EGH, and introductory steps.

Now let's clarify some reasons of introducing BSC at EGH. The director of the EGH started to plan the introduction of BSC in October 2009. In order to get head office permission, presentation data provided by Mr. Takano, showed following issues; (1) separation of operational plan and actual results, (2) lack of entire optimal situation, (3) staff members' exhaustion, (4) too much concentration in the financial measures, and (5) deterioration of communication among departments.

On July 2010, president Uchiyama gave an explanatory presentation to the hospital employees. "Until now, each employee strived to different directions. In order to go toward the same vision, our hospital needs to introduce BSC." At the interim review on December 9th 2010, he also introduced BSC as a strategic management system for patient satisfaction, employee satisfaction, and the realization of management stability.

Figure 2 shows the relationship between the implementation of strategic management at the hospital and the operational management at the nursing department.

Figure 2: Implementation of Strategic and Operational Management



Source: EBINA General Hospital

Financial Results and BSC

EGH made a trial of BSC in 2010, and introduced it in 2011substantially. Their effortw as in 2012,in order to cascade the hospital strategy downward to operational planning via department deployment. The departments to cascade downward were a nursing department, diagnostic medicine, and non-diagnostic medicine department. These cascades are not expanded without stopping, but in 2011, after a trial of six departments.

The medical revenue resulted well in2012 through the effect of BSC compared to former BSC. Operating profit was also increasing. The reason of the rising profit in 2010 was a 7 to 1 nursing system and a revision of diagnosis prices. There as on of the making a profit in 2011 was the introduction of BSC and in 2012was the rise of communication through cascading, said by president Uchiyama, and also performance was improved by the development of departments and penetration into the organization. This movement is shown in Table 2.

The EGH did not think to pursuit all of strategic objectives visualized in a strategy map at the same time. Under the condition, reasons for making a substantial contribution of BSC to the financial results would be clarified. Annually, the important issues were selected to manage some strategic objectives in the strategic map that constructed to connect with mid-term planning.

In 2011, the four selected issues were; (1) consent to emergency care, (2) extension of bed control function, (3) promotion and development of clinical paths, (4) reinforcement of process improvement. These measures were as follows; a number of emergency refusals, average number of days spent in hospital, utilization ratio of sickbed, a number of new clinical path and its utilization ratio, and number of process improvement in the hospital. A part of priority items were modified in 2012 and 2013, but we would see the transition of these issues in 2011.

Table 2: Actual Performance on EBINA General Hospital

Prioirty issues on 2011 and 2012	**Period**	**2009**	**2010**	**2011**	**2012**
	Development of BSC	Pre BSC	BSC trial	Execution	Deployment
Increasing medical revenue and operating profit	Medical revenuie	9.77 B	10.51 B	11.16 B	11.68 B
	Medical profit (Sales profit)	30 M	260 M	330 M	1,080 M
Consent emergency care	Num. of rejection	–	1269	950	829
Extend bed control function	Averge days spent	13.0 days	13.0 days	12.22 days	12.1 days
	% of utilization of sickbed (general)	79.2%	79.3%	78.8%	80.3%
	% of utilization of (general)	78.0%	80.5%	83.0%	88.8%
Promote and development clinical paths	Num. of new clinical path	4	0	21	12
	Num of new clinical path	6.6%	7.5%	10.2%	17.8%
Reinforce process imporivement	Num of process improvement in hospital	18	15	15	N/A
Reason of rising profit			7 to 1 nursing system	BSC	cascading

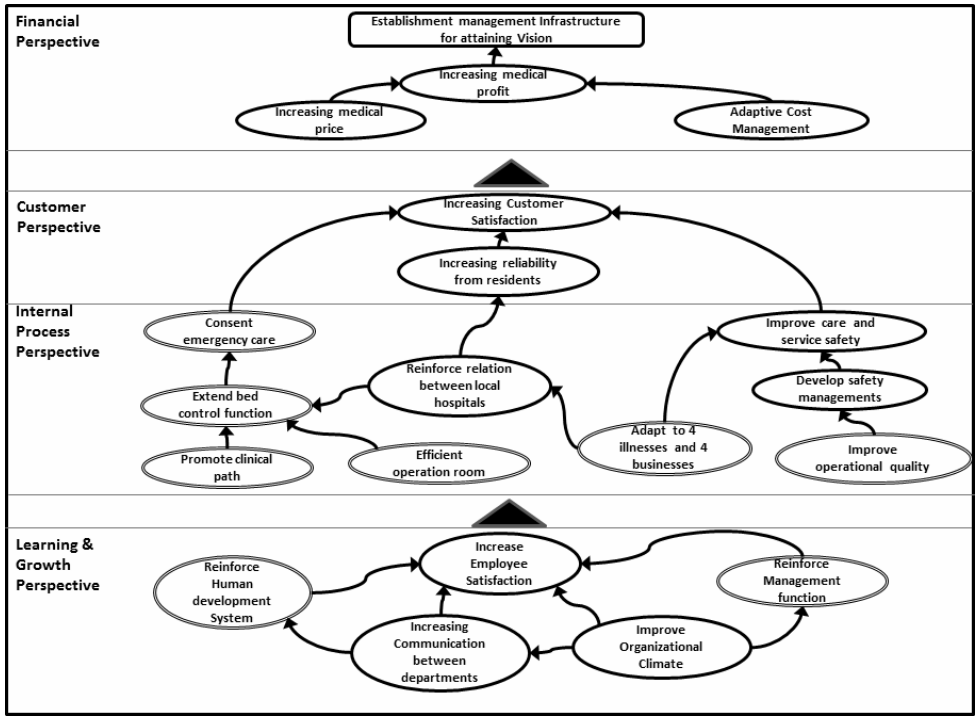
Source: Hearing from EBINA General Hospital

From in Table2, most of the indices improved comparing to the prior time of BSC introduction. Mr. Takano, a strategic planning office, said, "We thought the contribution to financial results might be beds control, but the definition of utilization ratio of sickbed changed in 2010 and 2011, it became impossible to measure the process improvement. The strategy is considered to look down on priority issues, especially focused on beds control in the use of strategic map.

Strategic Map and Scorecard at the Hospital Level

One year from April 2010, BSC trial was implemented. President Uchiyama addressed every doctor on the introduction of BSC, and talked about employee's cooperation whenever possible. In order to review the strategic map and scorecard built by president and Mr. Takano, a strategic planning office, the BSC project team was organized by senior management members including directors and nursing vice-president, Ito gave a two hour seminar for six hours. While he introduced BSC at the doctor' meeting and dug into the issues with hospital leading members. As a result, a strategic map and scorecard for the next five years has been accomplished. A hospital strategic map is shown in Figure 3.

Figure 3: Strategic maps at EGH (EBINA General Hospital)



Source: Hearing from the hospital staff to permit disclosure

In Figure 3, strategic objectives are illustrated in double track as a part of mid-term planning committed to corporation. Also they made a scorecard for the managing strategy. A part of the scorecard could be shown in Table 3.

There were several characteristics of BSC in the EGH:

1. The objective of introduction BSC was not only a communication tool but strategic execution. Most of the other medical institutions were introducing it as a communication tool, but the hospital's aim for the strategic execution was as a valuable issue rather than communication. Therefore the mid-term strategy was divided into some strategic themes to make a strategic map. But at the introduction stage, it could not afford time to treat strategic theme.

2. Results of control did not ask for the variation analysis between planned and actual value, but review the strategic modification. When the spring/autumn review, management need to assure the progress state of

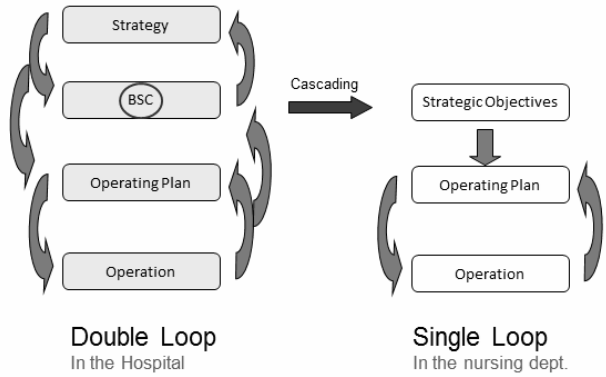
the strategy. Aim of the review is not reconstruction but modification of strategic map. Some medical institution seemed to rebuild strategic maps every year. As the strategic maps are visualization of the mid-term strategy, EGH hold the plan for five years. Therefore strategy is reviewed every half year in order to bear the environment changes. Double loop learning through strategic modification is the greatest feature at EGH as illustrated in Figure 4.

Table 3: Scorecard of EGH

Viewpoint	Strategic Target	Result Performance Index	Result in 2009	Target in 2012	Result in 2012	Target in 2013
Finance	* Establish Management Foundation to attain an Objective	Earnings of Medical Practice	9766113	11159254	11681874	12030619
		Unit Charge of Medical Treatment in Hospital	58176	65600	67163	68600
	* Secure and Improve of Medical Practice and Ordinary Profit	Unit Price of Outpatient Medical Treatment	17136	17584	19029	18015
		Ordinary Profit Ratio	1.8%	4.1%	5.9%	5.8%
		Personnel Cost Ratio	46.3%	47.7%	45.5%	45.9%
		Materials Cost Ratio	32.1%	30.7%	30.0%	31.5%
Customer	* Improve Customer Satisfaction	Number of Complaints	42	17	31	under 31
		Number of thanks to suggest ideas	17	over 28	44	Over 44
		Waiting Time (outpatient)	50.0%	65.0%	N/A	70.0%
	* Improve Creditability from Local Residents and Medical Institution	Number of New Impatient	863	938.4	957	945
		Rate by Introduction Card	69.35%	80.00%	68.48%	70.00%
Operational Process	* Improvement of Medical Treatments and Services to see a doctor at ease.	Emergent Reenterance Ratio to Hospital within 6 weeks after Discharge.	2.3%	under 2.7%	1.8%	under 1.8%
		Preparation Ratio of Leaving Hospital Summary within 14 days.	–	100%	90%	100%
		Preparation Ratio of Hospitalization and Medical Treatment Plans.	–	100%	77%	100%

Source: EBINA General Hospital (Only a part illustrated)

Figure 4: Double loop learning



3. As illustrated on strategic map in Figure 3, EGH adopted four perspective models as proposed by Kaplan and Norton. At many medical institutions, they modified cases of replacing the financial perspective and customer (or patient) perspective, and setting the outcome perspective or quality of health care (Ito, 2008). In general, medical institutions are different from companies, but the highest level of the hospital's strategy map is the customer perspective instead of financial perspective. The EGH was thought that the perspective has a different time frame, the strategy map should develop the cause and effect relationship by strategic objectives.

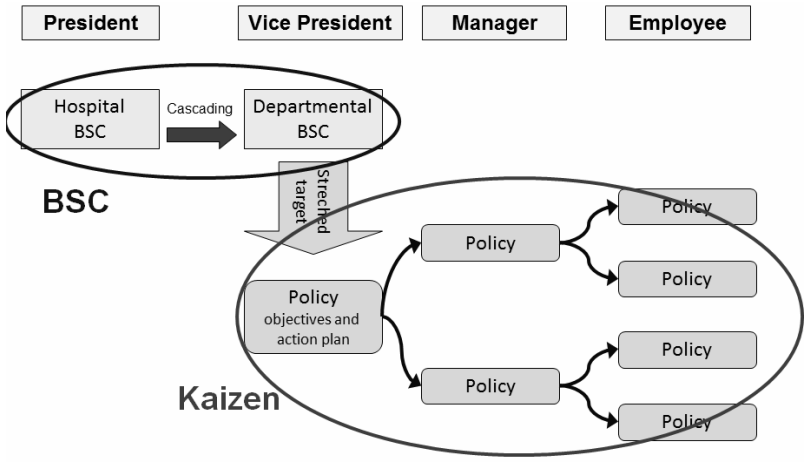
4. This project involved a doctors' department to introduce BSC. The hospital not only made a strategic map and scorecard, but cascading BSC to the other departments such as the nursing department, medical office work section, medical technology department, and doctors' department. Many hospitals treated doctors' departments as a sanctuary case, but the EGH was cascading the strategy to all departments. The cascade started from 2012, and there has been no outstanding actual result so far. We should be watching its progress in future. We could guess the effort of director was pretty tough.

5. This project involved a committee that was unrelated to BSC directly. That is, the hospital started the committee in charge of strategic objectives at BSC. Some examples are: the emergency medicine committee which has a strategic objective for realization. Such a committee does not achieve the strategic objectives, but there are opportunities when reviewing the attainment level of strategic objectives and the progress of initiatives.

Cascading down to Nursing Department and Diagnosis Control System

The hospital BSC to cascade downward to departments, and the departments develop the policy to implement QC Kaizen (Figure 5).

Figure 5: BSC and QC Kaizen



Source: Ebina General Hospital

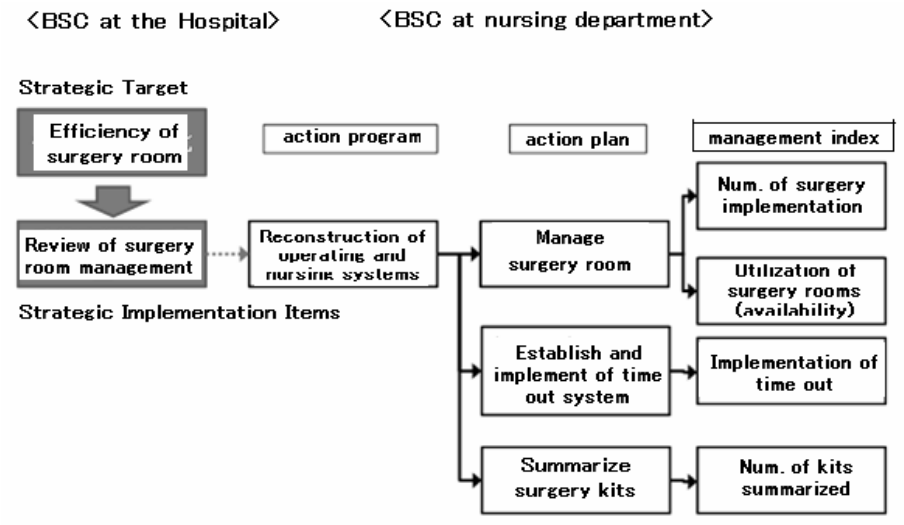
At the nursing department, they make an operational relationship diagram similar to a hospital strategic map. This diagram shows the relationships between strategy and nursing operational activities aiming to be a connecting pin between a strategy and operations. The operational relationship diagram at the nursing department has a diagnostic controlling system that is functioning on the management sheet in the same style as the hospital score card. Sub director Onda how to implement PDCA circles. Outlines are as follows.

The operational relationship diagram (ORD) at the nursing department is cascaded down by manager to the small nursing group such as ward ICU, operating room, and outpatients. Also other small group committees of inside the hospital center, inside the hospital risk, inside the hospital ICM, Physical system, and outer emergent are cascaded down. These committees are organized by the hospital committee, or nursing department special group. Such activities were composed with cascaded based on the ORD and daily activities and daily activities that they are planned, implemented, and self-checked by nurses. Late of month every small group is gathered to the checked and takes action.

For example, Figure 6 illustrates cascading of a surgery room. Strategic goal at the hospital is "efficiency of operation room" and its action program is "review of surgery room management. "They are cascaded down to the action program of "rebuilt of operation system and nursing system", and

more breakdown to the action plan of "discussion of operation room management", "establishment and introduction of timeout system", and "summarize surgery kits."

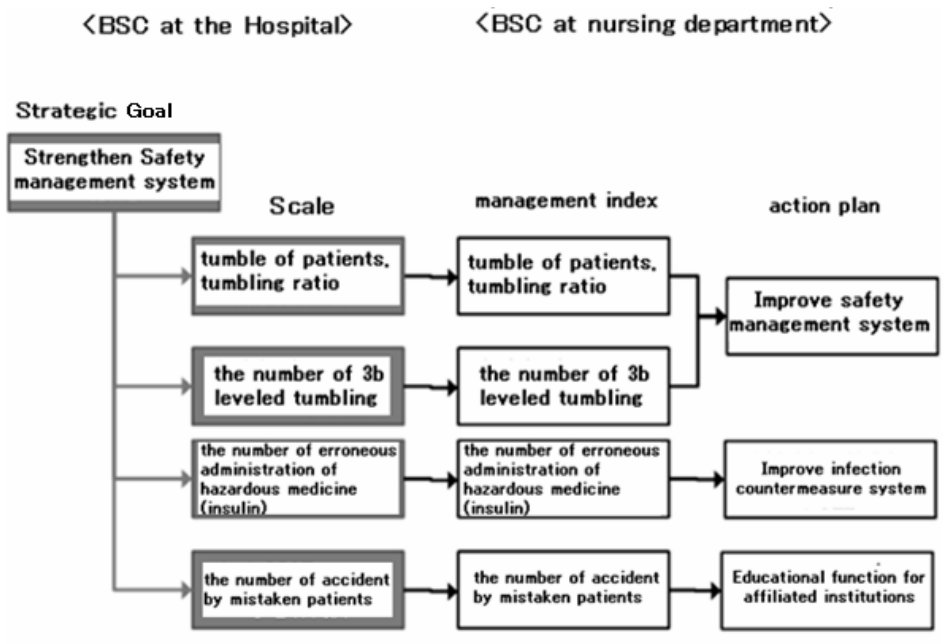
Figure 6: Cascading of a surgery room



In order to manage the influence of action plan, index of "number of surgery implementation", "utilization of surgery rooms", and "number of kits summarized" are prepared. At present, they do not use time out systems that are" stopping every operation before surgery starts, and they confirm problems". As a result, nursery department is controlled by the index of *Hoshin* management.

Next issue is cascading of strategic goal of strengthen the safety management systems illustrated in Figure 7. In this goal, there are scales of "tumble of patients, tumbling ratio", "the number of 3b leveled tumbling", "the number of erroneous administration of hazardous medicine (insulin)", and "the number of accident by mistaken patients". The same scales are used for the operational management index at the nursing department. In order to attain the target value, action plan is cascaded into the nursing small group. By such reason, daily management is implemented by PDCA cycle. When the activity is implemented, they review self-control, and end of a month, they gather ward meeting or nursing committee, and decide to take check and action.

Figure 7: Cascading of Safety Control



Management sheet of nursing department is used a part of PDCA monthly cycle for the daily management. PDCA cycle in the operational management, it can be clarified two kinds of turning method. One is a cascade to measure the index on the effect of action plan. The other is to fill the gap between actual and target value of BSC. Reasons to exist two cascading at nursing department are as follows.

In the case of having a strategic goal on the hospital strategic map and showed relationship to nursing operational plan, index and action plan can be made according to the process of scorecard construction as illustrated in Figure 7. While without a strategic goal on the hospital strategic map and it is thought important as an operational management goal, indexes are drawn on the operational relationship map of nursing department. When they did not have management index on the scorecard at the nursing department, they thought action plan and set management index on the process of *Hoshin* management as illustrated in Figure 6.

Compare with two approaches, cascading of BSC is thought to be an action plan to fill up the gap. But cascading down to the individual action plan for

nursing department, both approaches can be realized the operational planning.

Summary

This paper discussed the cascade downward of the strategy at the EGH (EBINA General Hospital). Discussion was to clarify two control systems using BSC. These are the diagnostic control system and the interactive control system used by Simons. Also we can understand that they are practicing it without confusion. BSC at one hospital was holding a function of the interactive control system in order to correspond to the strategic uncertainty. Therefore, when reviewing the strategy, a learning effect and the emergent strategy are expected to appear.

While cascading downward the nursing department, relational map of operational planning is closely related to the hospital BSC, there are many scales to rotate daily PDCA cycle functioned by diagnosis control system in the use of KPI. As a result, all nursing staffs tackled to attain the yearly KPI goal on the management sheet. The operational plan changes once a year according to the hospital's BSC. It can be understood supposing to the single loop learning. By making association chart of operation planning for nursing department, it is useful to empower the effect so far.

From the above results, you should be able to see if BSC has functions for both interactive control systems and diagnostic control systems. Until now, the strategic cascade was connected with MBO and *Hoshin* management. In the case of using BSC, it has a merit to take communication easier for the adopting company. Also in the same organization, they can realize to control different items. It becomes a good reference when cascading downward the strategy under the intangible management.

Acknowledgement

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Joint Operation of a Special Economic Zone by Enemies: The case of Kaesong Industrial Complex

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Abstract

Special economic zones have become important means by which states can hope to enact various developmental goals. They are used in a wide variety of environments and situations and thus have evolved to meet the conditions in which they are expected to operate. However, joint operation by enemy states is a venture that has not been tried in this way before. The border between North and South Korea is one of the most intensely contested in the world; periodic outbreaks of violence have punctuated the sixty years since the Korean Civil War was calmed by a ceasefire. The increasing inequality across the border, as the South has become a successfully developed capitalist country and the North has regressed into poverty and hunger, acts as a further stimulant to disorder. To reduce tension and promote cooperation, the South Korean government proposed various joint cross-border economic ventures, the most persistent and successful of which has been the Kaesong Industrial Complex, involving Southern capital and know how and Northern labour and land. The venture has been successful in terms of employment generation and production volumes but it has been bedeviled by political and managerial problems. This paper takes a case study approach to the situation with a view to exploring the issues involved and how problems have been managed to date. The path ahead remains a precarious one.

Keywords: cross-border ventures, Kaesong Industrial Complex, Korea, stakeholders

Disclaimer:

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Introduction

When the 1953 ceasefire stopped hostilities in the Korean civil war, the two newly separated countries had been almost completely destroyed by fighting that had raged throughout the peninsula. Millions of people had been killed and unknown thousands had become refugees. Numerous massacres had taken place, both of and by Communist sympathisers and the societal dislocation in a land that had historically promoted harmonious relations were almost complete (Kim, 2004). IT might be noted that North Korea is formally known as the Democratic People's Republic of Korea or DPRK, while South Korea is formally known as the Republic of Korea or ROK; these terms are used interchangeably.

Partly as a result of the brutal Japanese colonization (1910-45) and its interaction with the economic geography of Korea, the North then had better prospects than the South because of the presence of some mineral resources such as iron and coal (Wilson, 2005). Supported by Communist allies in the Soviet Union and China, bolstering the national ideology of *juche* (self-reliance), it might have been expected that the North would create a hegemonic power on the peninsula and overrun the South, which was then ranked in the world's ten poorest nations and relied for exports on human hair. However, as a result of American support during the Cold War period and the state-level developmental policies of the ROK proved much more fertile. Large companies, known informally as *chaebol* (literally 'millionaires'), were allocated resources and required, at first by force and later by negotiation, to achieve development goals. These *chaebol* – including Samsung, Hyundai, LG and others – have become internationally known as large, diversified ventures providing products in a range of consumer and business markets. Not without cost, the South Korean people have risen to an almost unimaginable level of income as the country has become sufficiently wealthy as to enter the 'rich countries club' of the Organization of Economic Cooperation and Development (OECD).

The contrast between North and South Korea has become increasingly intense, as stories of famine and misery in the DPRK have emerged (e.g. Kwon & Chung, 2012). The DPRK is a closed society and its military government has attempted to prevent any knowledge of conditions outside the country, particularly from the South, to permeate the society of the North to minimize the possibility of unrest. However, this has been only partly successful and the state has failed to find other forms of revenue to bolster the income of the citizens. Instead, it has relied principally on food aid and whatever overseas assistance it can extort from the international community

by threatening to use violence, including the construction and use of nuclear weapons.

The ending of the support provided by the Soviet Union in 1989 came as a severe blow and the state was forced to resort to other means of generating income. The first attempt to achieve this involved the Tumen River cross-border collaboration project.The concept was to match complementary resources held by different states in a triangular or quadrilateral geographical area. The model was to be the Sijori (Singapore-Johor-Riau Islands) that would join together the capital and managerial know-how of Singapore with the abundant resources and low cost labour from Malaysia and Indonesia. However, the Sijori project foundered on political disharmony and it was not very surprising that the Tumen River project, featuring the two Koreas, Russia and China, proved unable to yield useful results (Kim & Wu, 1998).

A second approach was to open a Special Economic Zone (SEZ) to permit the entry of some foreign investment into the country under controlled conditions. An SEZ may take various formats but customarily offers attractive conditions to potential investors by having lower tax rates, subsidized and secure connections to infrastructure and other benefits. Investors can also benefit from proximity to complementary firms which might prove to be a source of economies of scope and scale or an inspiration for creativity. The government benefits from income generated by taxes and rentalfees, the creation of jobs and the possibility of transferring technology into the local economy (see Table 1 below).

Table 1: Benefits of Hosting or Investing in an SEZ

Investors	Profitable investment opportunity Good quality infrastructure Access to local markets Access to low labour cost competitiveness
Government	Income generation through taxation and rents Employment generation Possibility of inward technology transfer Enhanced competitiveness of the economy overall
Workers	New jobs and income customarily higher than available in the agricultural sector Possibility of learning new skills which might later be used in an entrepreneurial venture

Source: Author

These benefits do not, of course, arrive without costs. These are evident in the case of environmental impact but there is also a social impact in terms of the

changes in people's lives and their social relations as a result of moving from the agricultural to the industrial sector. Since it contradicts the *juche* ideology, the government of the DPRK is wary of permitting the widespread connection of people with international markets since this removes agency from the people and, also, removes it from government agencies. SEZs represent an opportunity for the broadening and deepening of incipient connections that link units within the zone with each other and with institutions outside of it. There are several forms of connectivity involved, including the physical, virtual, commercial and organizational, each of which has internal and external dimensions (Walsh, 2013). Given the creative destruction that is characteristic of capitalism, the effects of these connections may be unpredictable and occasionally unproductive but may lead to enhanced value-adding opportunities.

Identifying a specific area where these connections can be permitted and managed, therefore, represents a desirable opportunity for the government to obtain much needed income in a manner that does not entail loosening the reins of control over the economy as a whole. The first SEZ, which was built at Najin-Sonbong in 1991, following promulgation of the Free Economic Trade Zone Law of 1984, achieved only limited success (Peng, 2002). Nevertheless, it was felt that the experiment was worth repeating with more resources and with a more systematic approach to planning. In part, this may be because the concept of an SEZ is one in which a specific legal regime is employed and where people can be controlled through restrictions which would not otherwise be considered acceptable but are in line with current international business norms. For this reason, some writers have referred to SEZs as exceptional spaces, drawing on the work of Giorgio Agamben (2005), who spoke about the relationship between the law and those who decided when the law need not apply. In an SEZ, business owners can come close to being those who determine when there are states of exception in operation.

This paper employs a case study approach to shed some light on the issues surrounding the development of Kaesong Industrial Complex. That is, it deploys multiple sources of data to ensure that relevant findings are understood and triangulated (Yin, 1984) through a process of conventional content analysis aiming at revealing structures and themes within the accumulated dataset and the reflective thoughts of the researcher (Hsieh and Shannon, 1995).

Kaesong Industrial Complex

While the ROK was under military rule, the state maintained a posture of implacable hostility to the DPRK symbolized by the personal confrontations of military personnel from both sides across the demilitarized zone (DMZ), However, once democratization was achieved as a result of a fierce struggle by the people, elected governments tended to take a more emollient position towards the North. This is perhaps best seen in President Kim Dae Jung's 'Sunshine Policy' which aimed to improve relations in a variety of contexts (Moon, 1999). There are several reasons for such a policy:

- Reduction of tension could lessen the chance of armed confrontation. There has been a string of such activities through the years which have been tragic in themselves and also had the potential to cause a large-scale conflagration;
- Better relations between the two sides would enable more family reunions. These have been emotional affairs when family members have been estranged by an impermeable border (often not of their own volition) for fifty or, now, sixty years;
- Electoral benefit, particularly among younger and better-educated voters, although this policy is by no means a universal vote-winner;
- Economic benefits: South Korean investors, led by the *chaebol*, look to the North not just in terms of political or human terms but as a significant opportunity for obtaining access not just to a significantly-sized pool of low cost labour but also a local market which is as yet undeveloped but has potential for significant growth in both the consumer and business market sectors.

There is also the consideration for investors that they might achieve a significant amount of personal and corporate status if they can manage to associate themselves with what could be considered to be a solution to the North Korea problem.

Given the receptiveness of the North Korean government to the construction of a new SEZ and the willingness of state and non-state actors to extend economic support to the North, it was not surprising that such a plan was created. Chung-Ju Yung, the late honorary chair of the Hyundai *chaebol*, proposed the West Coast Industrial Development Plan (WCIDP) in visits in 1998 and 1999 (Park, 2004). This plan was designed with a view to connecting industrial development in the North with the capital of the South, Seoul, which is located in the north-west of the country only some 40 km short of the border. Seoul is surrounded by intensive infrastructure in both the hard and

soft varieties. Hard infrastructure include roads, railways, sea and airports, electricity, water and telecommunication supplies, while soft infrastructure includes development plans, managerial competence and virtual and real-tie connectivity between people, organizations and government agencies. Seoul is also fully equipped with the full range of business infrastructure facilities: that is, marketing, advertising and design agencies, commercial law firms, research laboratories and so forth.This means that distribution domestically or internationally is very convenient and, also, Seoul's population of more than 10 million people represents an important market in its own right. The WCIDP aims to add, therefore, another production node which could be linked with the already existing production-distribution-consumption network. This clearly works to the benefit of a company such as Hyundai, which obtains the opportunity to diversify its production base and obtain access to low cost and, it might be presumed, well-motivated labour and, as a large multi-product enterprise, it can afford to off-shore only those activities which can be managed by low-skilled workers without much training or transfer of technology. There were from the start, therefore, some tensions in the KIC project right from the time of planning:

- North Korean workers have spent their lives under a regime that instructs them to view capitalist endeavor in general and South Korean capitalist endeavor in particular with great suspicion. The initial assumption that workers would be happy to move into the industrial sector because of higher wages may not by entirely justified;

- The way the plan was constructed enabled South Korean (and potentially other) firms to invest in a way that limits the transmission of skills and technology that would be required in the North to enhance its overall competitiveness and to strengthen other economic activities in the country.

At the start of the period of overseas foreign direct investment (FDI) in the 1980s Korean firms had a reputation for maintaining strict and sometimes abusive managerial regimes and a style that combined Confucian paternalism with military discipline. That style has softened to some extent over the years but, nevertheless, there remained the possibility of friction in the workplace. In industrial estates across Asia, when workers have moved into a Taylorist working environment from one that, like agriculture, is structured according to natural phenomena such as daylight and the seasons, there is a danger the workers will suffer from alienation – that is, the feeling of the loss of power and the ability to make any decision about anything of consequence – and this can manifest itself in stress, illness, absence from work and generally lower

productivity. Taylorism is named after Frederick Wilmslow Taylor, the founder of scientific management, which aimed at maximizing output from workers by thinking of them as simply an input into the business of production: as, quite literally, a 'factory hand.'

In a Communist country such as the DPRK, the state is identified with the people individually and so it is not considered generally necessary to create trade unions to represent specific groups of workers or, if they do exist, they may have identical interests with the state and management.

The Offer to Investors

Since the various lots in the KIC were to be put out to rent by interested investors, it was necessary to structure the terms and conditions offered in the complex to be superior to what is available elsewhere. Since the KIC and the Najin-Sombong SEZ were the only places in the DPRK where it was permitted for foreign investors to build their ventures, there was no need to position the KIC so that it was more competitive than other parts of North Korea. However, it was important to be more competitive than the two principal alternative options: remaining in South Korea or investing in China.

As mentioned previously, South Korea as a fully developed business environment and both a substantial and well-developed local market and so convenient access to world markets through efficient distribution methods and good diplomatic relations. Conditions are not perfect, of course, and the country has suffered from the effects of the 2008 banking crisis and the subsequent crisis of austerity along with the rest of the world – by linking itself to the global production and consumption system through the KIC, this is something with which the North Korean government will have to learn how to cope. In South Korean society, furthermore, the neoliberal reforms proposed for economic woes have produced baleful results that have damaged people's lives and prospects (Chang, 2012). Rising costs of living and improved wages have meant that low labour cost competitiveness is no longer possible. When companies have wished to continue this form of production, they have increasingly looked either to Southeast Asia or, in particular, to China. Since the Open Door Policy was announced in 1979, a succession of SEZs has been launched in the country, at first in specified coastal areas but then right throughout the land. The SEZ has proved an incredibly popular business model to the extent that large numbers of local authorities wish to take advantage of the potential benefits that they may bring, even when it has been against the law in some cases to have opened one (Rosen, 1999:80). Chinese SEZs offer real competition to KIC because of

the sheer number of them and because there are still more workers to draw into the industrial sector from the agricultural sector and this acts as a downward pressure on wages that is intensified by repressive measures taken by state agencies against workers and their representatives (HRW, 2013). The Chinese government has also invested extensively in transportation infrastructure making the distribution of products internationally efficient and convenient. Owing to the size of the domestic market, market development by private sectors companies, both Chinese and foreign-owned, has meant there are millions of increasingly sophisticated consumers who understand quality features of goods and services and are prepared to pay premium prices for luxury items in some categories. Indeed, among the nouveau riche of the country, conspicuous consumption has become a well-established mode of behavior.

Compared to the advantages offered by South Korean and Chinese business locations, North Korea has very little to offer and so the KIC management was obliged to offer better financial terms. The minimum wage was set at US$50 per month (plus US$8 in insurance and allowances), which is less than in China and only a fraction of the South Korean rate. The working week was established at 48 hours, which compares to 44 hours per week in both China and the ROK. A tax holiday was also offered in which companies would initially pay no tax at all and then receive subsidies for several years before reaching the final level of 10-14%, while the corporate tax rate is 15% in China and 23-28% in South Korea (Nam, 2012). In addition, there are no customs payments to meet, no unions and very low transportation costs.

In addition to these incentives, it was also necessary to convince investors that a governance system would be put in place which would provide confidence that the published rules would be observed and that there would be no excessive government interference (some interference is considered to be unavoidable in international business, especially in East Asia). It was not necessary for the governance system to be transparent as it would need to be in the West but it should inspire confidence that commitments would be honoured.

These systems were put in place and construction began in 2004. The plan was to build on an area of 20 million pyong (a pyong is a Korean unit of measuring area equal to 3.95 square yards), with 8.5 million pyong devoted to industrial activities and the remainder devoted to residential, leisure and tourism space in the original city of Kaesong and two new cities (Park, 2004). By 2013, 123 South Korean companies had opened facilities in KIC and they employed 53,000 workers which generated US$90 million in revenue for the

state, which is in great need of foreign currency (Williamson, 2013).It is estimated that a total of 200,000 people are dependent on the SEZ in and around the area. However, it is difficult to identify the exact level of impact the project has because of imprecision from the DPRK state agencies. It is said, for example, that the workers cost a total of US$134 each per month, of which 45% goes to the government and the remainder is paid to the workers in the form of coupons and some cash. It is very difficult to quantify the value of these coupons and it is likely that some at least are used as part of a secondary market as workers sell the items that the coupons may be used to obtain (Kang, 2013).

Closure

The political leadership of the DPRK, in its capital of Pyongyang, has acted in ways which appear to be irrational to most of the outside world but which seem calculated to bring certain benefits to the regime. The rush to test nuclear weapons and missile technology, as well as the sinking of a South Korean navy ship and other provocations have had the effect of maintaining a high level of tension over the years, which has waxed and waned but never disappeared. At times of high tension, the ROK and its allies, principally the USA, have responded with various sanctions before eventually returning to negotiations over one issue or another. In general, the Sunshine Policy approach meant that South Korean negotiators were prepared to maintain an optimistic and positive stance towards the North as far as that was possible. However, this approach rather changed with the election of the country's first female president, Park Geun-Hye, whose conservatism and comparative truculence represented changes in sentiment in a country undergoing the impact of the banking crisis (Gray, 2013). As a result, KIC, which had remained open through a number of previous crises, was closed after negotiations relating to Pyongyang's third nuclear test failed to yield satisfactory results.

Throughout the first half of 2013, a series of negotiations were held to try to persuade the North Korean state to reopen the KIC it had closed and from which it had withdrawn all workers. As the weeks lengthened into months, the costs suffered by the companies involved from lost production began to be measured by the billions of dollars. South Korean workers who were involved in operating the factories were withdrawn in May after lengthy negotiations failed to yield agreement. Talks continued until July but without further resolution (BBC News, 2013). Eventually, the park was reopened in September of that year and, by March 2014, production levels were said to be

approaching what they had been prior to the closure (Korea Herald, 2014), although the losses caused by the stoppage were said to be around 1 trillion won (US$960 million) (Associated Press, 2013). There are also plans to improve the connectivity between the park and the rest of the world through introducing internet services for the first time, simplifying customs procedures and making access to the centre from the South more convenient (Yonhap, 2014). It seems likely that slow progress marked by the achievement of a series of milestones will be threatened and possibly halted or reversed by external political shocks.

Discussion

SEZs contribute to the uneven development of a region. First nature is the situation of the environment before the intervention of humanity and second nature represents the state of the environment after it has been put into productive use by humanity. However, as the capitalist system matures and spreads across the land, broadening and deepening its hold on the activities within a geographical territory, the nature of the environment is again rearranged so as to link more closely the places of production and consumption. SEZs are part of the new networks formed as part of the third nature and represent nodes of hyper-productivity. For multi-stage productions, raw materials and semi-finished goods may be transported to various SEZs before they reach their destination markets. These activities may be internalized within a single firm that occupies multiple sites or they may involve market transactions between different firms. Although there is a tendency for firms within a single SEZ to follow similar operations to each other, owing perhaps to the location of the zone near an important natural resource, its proximity to specific markets or the time when it was opened, this does not always have to be the case. Economies of scope and scale also tend to promote homogeneity of activities within an SEZ and the more similarity there is, the more strongly the node of production will be linked with specific suppliers and markets and the lower will be the connectivity with the local economy and communities. From the state level perspective the enemy states have quite contrasting objectives. In the South, insofar as the current government wishes to place any constraints on the business sector, it would like the KIC to be a bridgehead into territory which would become connected in multiple ways with the institutions of the north, preferably through commercial relationships. This is the opposite view from that in Pyongyang, where it is hoped that the spread of connectivity can be limited and managed in such ways that technical benefits will be brought to the local economy but no undesired additional information or opportunities are

simultaneously admitted. It is slightly paradoxical that this is the method used by South Korea in managing its entry into the world of rapid economic growth – importing technology and know-how while doing its best to avoid importing consumer goods or permitting inward investment.

The meanings and purposes of the KIC are, therefore, multiple, contested and contradictory. The extent to which control over its future development can be effected remains to be seen.

Conclusion

Much contemporary business literature starts from the perspective that, owing to the origin in microeconomics, firms have agency in their actions and managers can do more or less whatever they want according to their strategies and plans. The example of Kaesong Industrial Estate illustrates that this is not the case for all businesses. The presence of the North Korean government and its heavy-handed approach is a rather extreme version of the reminder that no person or organization is an island, entire of itself. Instead, they are tied to a wide range of other stakeholders through the different forms of connectivity described previously. In general, the higher the level of connectivity, the higher the level of difficulty people and organizations have in acting entirely autonomously. At the same time, the higher the level of connectivity, the more thoroughly embedded the individual or organization is in the capitalist system and the greater the degree of what Karl Polanyi called the 'great transformation' (Polanyi, 2002) that has passed over the geographical territory involved. It is not surprising that, for ideological reasons, the North Korean authorities wish to limit or prevent this from happening but this is a difficult act to achieve. This does not mean it is impossible to achieve the balancing act between connectivity and control but there are very few if any examples of it having been achieved nevertheless.

The example of China shows that it is very difficult to sustain a growing economy when the labour force remains too poorly paid to buy the products that it makes. This can be managed on a temporary basis, as long as the authorities involved are prepared to rely on continued demand from external markets and this represents a form of loss of economic sovereignty. However, under conditions of capitalism, periodic crises are unavailable and it is during these times that governments must take steps to replace reduced international demand from internal resources. One such means of doing this is to enable the wages to rise so that people can buy more consumer goods. This represents an ideological conflict.

As previously noted, industrial estates are a form of exceptional space, at least in certain of the possible manifestations that they can take. In an exception space, the normal regime of law and regulations does not pertain and this generally means that the way people are treated is worse. However, at the Kaesong estate, evidence suggests that North Korean employees are being treated according to corporate norms employed in the South and, despite some complaints, receiving better conditions than they would normally endure.

Of course, more research on progress in this area is required in the future.

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Business Sustainability of Small and Medium Scale Enterprises: A Case Study based on Bottled Water Industry in Sri Lanka

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Abstract

The main objective of this paper is identification of factors affecting development of bottled water industry as a Small and Medium Scale (SME) economic activity in Sri Lanka. Having the world best clean water sources, this industry has been identified as one of the high potential industry for foreign exchange earnings in Sri Lanka. The methodology employed is a structured questionnaire based on field survey of fifty five bottled water SMEs. A field survey confirmed that the main operational challenges are related with finance, marketing, products and process technological problems, environmental, social, health, business management deficiencies and human resource related problems. The major growth obstacles are lack of business relationship and informational support, product and process technology issues and the business management deficiencies. The main policy recommendations are developing training programs on business management, introducing information supports and awareness programs on latest development on product and process technology, provision of an appropriate regulatory and legislative framework for the industry. By identifying the core issues affecting the operation of bottled water industry, this research study will contribute to the understanding of ground situation of this subtle industry in Sri Lankan context. The methodology employed and the policies derived can be used as guides to similar types of research in other countries as well. It is an exploratory case study.

Key words: Small and Medium Enterprises; SMEs, Bottled Water Industry, Critical success factors, Sri Lanka.

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Introduction

A total of 89 bottled water industries are registered with the Ministry of Health for supplying bottled water to the local market. A few of them are capable to supply the international market. But compared to the world renowned bottled water brands as Dasani, American Water and Aquafina, Sri Lankan domestic bottled water industry is still at an embryonic stage. There is no proper clustering or networking among industrialists for their growth and development.

Bottle water industry is fairly young to Sri Lanka (Kumarasinghe2008). Most of manufacturers operate on SME scale supplying just to the doorstep market and not entertain the advantage of economies of scale in production. Very few of them have broken the barriers and entered the global market. The global bottled water industry's rapid growth is surprising in light of the retail price of bottled water. It costs from 240 to over 1,000 times more per gallon to purchase bottled water than it does to purchase a gallon of average tap water in some countries. According to industry stock analysts, the profit margins in the business are in the margin of around 25 to 30 percent. (http//www.nrdc.com). But most of the local SMEs are struggling to survive in the local market having no proper margin for their products. High product cost, high competition from unauthorized suppliers, and bargaining power of venders make these SMEs helpless. They operate on SME scale and therefore cannot take advantage of advantage of scale of production and high technology.

This study is framed to identify the factors affecting the development and diversification of SME bottled water industry and to recommend policies and strategies to overcome those barriers and to reach full potentials with sustainability. More specifically this case study addresses the following three main objectives:

- Carry out a situation analysis so as to understand the basic characteristics of the Sri Lankan bottle water industry.
- Ascertain the main problems encountered by the bottled water SMEs in their growth and process of diversification.
- Recommend policies and strategies to overcome these constraints so as to reach full potentials of this industry.

Methodology and Conceptual Framework

The conceptual framework precisely based on the 'SME vicious cycle' developed by the Dassanyaka (2008), Dasanayaka and et.al (2011). It represents eight factors identified through the literature review and discussion with various stakeholders in this industry. The development of the organization is the dependent variable of all these internal factors. In addition to these internal factors, four external factors identify to penetrate for foreign markets. These external factors are International quality standards, International marketing standards, Sustainable green issues and strategy related to marketing ,and Competitiveness. The factors are listed as under:

- Finance related issues
- Marketing related issues
- Information and production technology related issues
- Environmental, social and health issues
- Human resources problem
- Lack of business linkages and informational support
- Product and process technology issues
- Management deficiencies

Primary data was collected from 40 bottled water entrepreneurs and 15 other stake holders were interviewed from the bottled water industry in Sri Lanka to verify identified variables and indicators through operationalization of conceptual framework and structured questionnaire. The enterprises located in the Western, North Western, Sabaragamuwa and Central Provinces in Sri Lanka were included in the study. In this study, the researcher was trying to explain the relationships existing between independent variables and dependent variable i.e. development of the bottled water industry in Sri Lanka. Hence, the study belonged to co-relational and explanatory type research in nature. Further, the study was conducted in a natural environment with less interference from the researcher. It was conducted in a non-contrived study setting. About 89 industrialists are registered in Food and Beverages department for manufacturing and selling of bottled water in Sri Lanka (Ministry of Health, 2012). Due to time and resource limitations, approximately 40 industries and other 15 nos. related institutions and expertise in the industry were selected for the study.

The Situation Analysis on Sri Lankan Bottled Water Industry

Registration of bottled water units

Drinking 'bottled water' is a concept that was introduced to the Sri Lankan psyche in the late 1980's. The industry which started out with a few minor companies bottling and selling water without any regulatory framework, is now a thriving business. As per the current regulations any company that wishes to market bottled water must be registered under the Health Ministry. When the regulations came in force, many of the small cottage level bottled water people dropped out because they were unable to comply with this requirement. The "Bottled Water Registration" was introduced in 2005 and was brought into operation in January 2006. The registration for "Bottled Drinking Water" is valid for three years, during this period the plants are monitored by the authorities. The Registration for "Bottled Natural Mineral Water" (for which UV treatment is not used) is valid for one year only. There are 89 local brands registered under the Public Health Division along with six imported brands. Along with the Ministry registration, 75 companies obtained the Sri Lanka Standards Institute (SLSI) certification. This SLSI certification is not mandatory but it adds some image of good hygiene to brand for better marketing. Normally registration has to be obtained from Department of Food and Beverages of Ministry of Health to start new bottle water firm with the water quality test reports obtained from Industrial Technology Institute of Sri Lanka. However Health Ministry forwards the application to the SLSI for their approval and recommendation. Apart from this SLSI certification, the government Public Health Inspector (PHI) authorized for the plant location area must certify the location and other physical conditions of the well and the plant. According to the bottle water industrialists, this procedure takes long time and includes unnecessary repetitive task (two times water quality tastings by both parties) which add up to extra costs . Also the annual fee for the registration (SLRs.100,000.00 per annum) is unbearable for Small Scale entrepreneurs. Therefore many unregistered SME bottled water suppliers operate in market. Most of these registered bottled water plants are located in Western and Central Provinces in Sri Lanka.

Consumption data

Although the exact data is not available, approximately, 200,000- 300,000.00 liters of bottled water is produced per day and used in local market from of all categories of units. Usage of bottled water is increasing very rapidly due to urbanization, change of lifestyles and as well as mostly due to non-

availability of safe, pure, chlorine- smell free, reliable drinking water everywhere in the country. People tend to use bottled water even at households against fear of spread of water-based kidney diseases in dry zones of the country. New markets are opening up in the north and east, where there is a high potential for bottled water industry due to scarcity of pure drinking water. Annual demand for bottled water is estimated to increase in 8-10% and total drinking water production in the country has already passed 80 million liters in 2012 (Bottled Water Association of Sri Lanka, 2012).

Marketing of bottled water

It has three market segments: small, medium and large scale operators. Generally, small scale manufactures supply to retail market only or depend on the bulk purchasers affected most by the seasonal demand whereas the medium level suppliers has both retail and bulk supply subjected to same pattern, but variation is not so vulnerable in respect of production volume. The large scale manufacturer who serves both retail and upper niche markets as well as large volume supply to the industry, commercial institutes and hotels has its own strong marketing arms. Sri Lankan bottled water products are exported to many countries like European, Canada, Australia, Middle East, Maldives and Singapore. There are few major players in the industry who own considerable market share in local market and also are leading exporters in the country. Other than the aforesaid manufacturers, there are many exporters who purchase from SMEs in bulk and export on their own names. A very few SMEs produce directly to export market. But the total volume of water export from Sri Lanka is no-where in the total world market consumption figures.

Categories of bottled water

There are several categories of bottled water used in the international market such as carbonated water, medicinal water and energetic water etc. Sri Lanka produces largely traditional drinking water and mineral water categories only. There is a huge gap in the world demand and Sri Lanka's supply capability which needs to be addressed systematically to be a success in the industry. The steady market share increase and the preference of consumers to choose safe, high-quality bottled water over other packaged beverages is making bottled water one of the more popular beverages in the world in the years to come.

Data Analysis and Interpretation

The questionnaires for collection of the data were sent by snail mails, e mails and personnel delivery to fifty five entrepreneurs, consultants, managers and exporters. Forty six representing 88% responded positively. High per centage of respondents are High percentage belonged to males in age group of 30 to 60 years. Over 95% of responded firms were in business less than 15 years. All the entrepreneurs are the first generation in business. Over 75% of these owners have business management experience of over 10 years. Seventy five percent of these bottled water business owners have GCE O/L and A/L qualification; 20% are graduates.

Descriptive Statistics and Reliability Tests

Descriptive statistics obtained for the identified eight obstacles for the development of bottled water SMEs in Sri Lanka are mentioned in Table 2. The arithmetic mean of the indicators under each concept and variable is taken as observed value of the same for analysis. The observed mean is taken as three (3) on five point Likert scale employed here to observe data. The reliability and validity of the indicators measured earlier support this method of computation to proceed with the data analysis.

Table 2:. Summary results of descriptive statistics

Variable	Mean	Std. dev.
1.1 High Cost of Finance	4.098	0.629
1.3 Low access to credit facilities	3.989	0.756
2.3 Low Global Market accessibility	4.155	0.480
3.1 Slow Technological adaptation & Development	3.647	0.712
4.1 Perception on plastics Bottles	3.620	1.058
5.2.Lack of professional Labour	2.684	0.710
5.3 Cost of Skilled labour	2.587	1.002
6.1 Low access to information need for development	4.098	0.554
7.1 Cost of production & Distribution	4.056	0.546
7.2 Product quality	3.913	0.627
8.1 Week Organizing Structure	3.087	1.034
8.3 Less Directing	3.794	1.009
8.5 Week financial management	3.544	0.999

Source: Structured questionnaire survey

Table 2 depicts that, except labour related issues, all the other variables have got a calculated mean value above the average of the five point Likert's scale. This proves that selected eight variables and concepts show the positive impact to hinder the development of the bottled water industry in Sri Lanka. But the standard deviations of same factors are significant in some instances which may have an impact on calculated means of such variables making them non-decisive factors of the dependent variable. Technological, environmental and managerial issues fall under such category. The reliability and validity of the indicators measured in Table 3 below support this method of computation to proceed with the data analysis. Table 3 shows the reliability and validity tests for all eight factors identified as obstacle to development of the Sri Lankan bottles water SMEs. As Cronbach Alpha value is greater than 0.5 for all these factors it indicates high impact of these factors for the development of sector.

Table 3: Reliability and validity test

Variable	Indicator	Alpha	Validity	Acceptance of variable
1.1 High Cost of Finance	1.1.1High Interest rates	0.544	0.843	Accepted
	1.1.2 Inflexible terms & conditions	0.544	0.843	Accepted
1.2 Low access to credit facilities	1.2.1 Lack of awareness on available credit facilities	0.743	0.892	Accepted
	1.2.2 Low level of careness for small scale entrepreneurs	0.743	0.892	Accepted
2.1 Low Global Market accessibility `	2.1.1 No Contact with international supply chain systems.	0.757	0.835	Accepted
	2.1.2 Less support from govt or any other Organization to access the global market.	0.757	0.789	Accepted
	2.1.3 Less innovative due to resource limitations	0.757	0.771	Accepted
3.1 Slow Technological adaptation & Development	3.1.1. Less access to modern technology	0.871	0.854	Accepted
	3.1.2 Low knowledge on new technology	0.871	0.852	Accepted
	3.1.3 Qualifying product standards	0.871	0.889	Accepted
	3.1.4 Assistance on technology & Training	0.871	0.808	Accepted
4.1 Perception on plastics Bottles	4.1.1 People reject buying plastic bottles	0.927	0.966	Accepted
	4.1.2 Systems in place to recycle bottles	0.927	0.966	Accepted

5.1.Lack of professional Labour	5.1.1 Adhere to rules & regulations on taking leave & resigning.	0.681	0.871	Accepted
	5.1.2 High Labour Turn Over ratio	0.681	0.871	Accepted
5.2 Cost of Skilled labour	5.2.1 High Cost of professional labour	0.757	0.824	Accepted
6.1 Low access to information need for development	6.1.1 Lack information on global market opportunities and trends	0.712	0.881	Accepted
	6.1.2 Lack of information on business support Centers	0.712	0.881	Accepted
7.1 Cost of production & Distribution	7.1.1 Less Backward Integration of production	0.527	0.824	Accepted
	7.1.2 No economy of scale of production	0.527	0.824	Accepted
7.2 Product quality	7.2.3 Inability to have modern technology to produce high quality products	0.529	0.697	Accepted
8.1 Week Organizing Structure	8.1.1 No Classification of duties	0.784	0.907	Accepted
	8.1.2 Less Devolution of Power	0.784	0.907	Accepted
8.2 Less Directing	8p & Motivation of workers	0.775	0.904	Accepted
	8.3.2 Training & knowledge sharing	0.775	0.904	Accepted
8.3 Week financial management	8.3.1 Annual budget, P&L accounts	0.549	0.833	Accepted
	835.2.Net profit	0.549	0.833	Accepted

Source: Structured Questionnaire Survey

Correlation and Regression Analysis

The dependent variable, development of the bottled water industry, was finally explained by two variables as of three out five factors have been dropped by the factor analysis in order to test the dimensionality of the dependent variable. The variables "net profit increase" and "production capacity increase" were combined to compute new variable that describes the dependent variable. Combined dependent variable was correlated with all independents to find out the significance of each concept/variable with dependent variable. The ultimate results as tabulated in the Table 4 present the bivariate correlations for all constructs of the industry. The significant correlations at 0.05 significance levels are flagged. The concept Lack of business relationship and informational support shows moderate positive relationship with the development of the industry. (Pearson correlation values are 0.483 and Sigma value is 0.001). That means, this rejects the null hypothesis and accepts with 95% confidence interval that the above concept is at moderately positive correlated to hinder the development of the bottled

water industry. Also Production and Process related issue has positive and low relationship with the dependent variable i.e., development of the industry. (Pearson correlation value is 0.366 and 0.013 Significance value). That means the above concept shows significantly low but positive relationship to the non-development of the industry. Furthermore, Management deficiencies shows most significantly moderate positive relationship with the development of the industry. The Management deficiencies is one of the key issue with the SMEs in Sri Lanka. Pearson correlation value is 0.642 and the significance value is almost zero. Lack of business relationship and informational support has positive moderate relationship with Product and Process issues in the industry whereas the same has low positive relationship with Management deficiencies of the entrepreneurs. The Marketing related issues has a significant very low negative relationship with Lack of business linkages and Collateral relationship of entrepreneurs. The other concepts, Financial related issues, Environmental problems, Labor related issues, and Technological issues, do not show any relationship with each other or any of the other concepts or dependent variable.

Table 4. Summary of Correlation output results

		FINANACE	LABOUR	PRODPROCE	MANEGER	MARKT	TEHCNQ	ENVIRON	LINKAGE	JDEPENDANT
FINANACE	Pearson Correlation	1								
	N	46								
LABOUR	Pearson correlation	.012	1							
	Sig. (2-tailed)	.938								
	N	46	46							
PRODPROCE	Pearson correlation	–.30	–.078	1						
	Sig. (2-tailed)	.845	.611							
	N	45	45	45						
MANEGER	Pearson correlation	–.067	–.242	.270	1					
	Sig. (2-tailed)	.659	.106	.073						
	N	46	46	45	46					
MARKT	Pearson correlation	.015	–.090	–.074	059	1				
	Sig. (2-tailed)	.922	.551	.627	.696					
	N	46	46	45	46	46				
TECHNQ	Pearson correlation	–.055	–.159	.047	–.206	–.078	1			
	Sig. (2-tailed)	.719	.290	.759	.170	.606				
	N	46	46	45	46	46	46			
ENVIRON	Pearson correlation	.267	–.103	–.091	.45	.246	–.96	1		
	Sig. (2-tailed)	.073	.497	.551	.768	.099	.527			
	N	46	46	45	46	46	46	46		
LINKAGE	Pearson correlation	.031	–.039	.732	.359	.310	.037	–.205	1	
	Sig. (2-tailed)	.839	.799	.000	.014	.036	.808	.171		
	N	46	46	45	46	46	46	46	46	
JDEPENDANT	Pearson correlation	.096	–.063	.366	.642	–.135	–.094	–.202	.483	1
	Sig. (2-tailed)	.527	.676	.013	.000	.369	.533	.179	.001	
	N	46	46	45	46	46	46	46	46	46

Lack of Business relationship and informational support and Industry non- development

Table 5: Results of regression analysis on business relationship and informational support

Independent Variable	**Dependent Variable**			
	Std. coefficient β	F value	Significance ($p < 0.05$)	Adj. R^1
Lack of business relationship & informational support	0.483	13.402	0.001	0.216

Lack of business relationship and the informational support are hampering the development of bottled water industry as shown in Table 5. The overall model is significant (Significance for F statistics< 0.05). The adjusted R2 for the variable is 0.216 and accounts for the amount of variance of the dependent variable (i.e. respective measure of performance) explained by the significant independent variable. The standard coefficient ($\beta = 0.483$) which indicates the variation of the dependent variable in presence of unit variance of the independent is also significant and exhibits good relationship between the independent and dependent variables.

Product and Process issues and Industry under-development

Table 6: Results of regression analysis on products and process issues

Independent Variable	**Dependent Variable**			
	Std. coefficient β	**F value**	**Significance ($p < 0.05$)**	**Adj. R^1**
Products and Process issues	0.366	6.655	0.013	0.114

Products and process related issues also have an effective relationship to the Industry development problem but little less significant compared to the business relationship and collateral linkages have with. The adjusted R^2 is less significant and explains only the 11.4% of the overall variation of the development problem. Of all, products and process issues are a responsive fact that affect to the development of small and medium scale bottled water industry in Sri Lanka.

Management Deficiencies and Industry under-development

Business Management deficiencies are proven and significantly affected factors for the development of overall SME sector in the country as pointed out by many researchers (Dasanayaka, 2008; Priyanath, 2006). This factor was also proven significant for the bottled water industry as well according to the results obtained from the regression analysis of this research.

Table 7: Results of regression analysis on management deficiencies

Independent Variable	**Dependent Variable**			
	Std. coefficient β	**F value**	**Significance (p < 0.05)**	**Adj. R^1**
Management Deficiencies	0.642	30.872	0	0.412

The R_2 is significant (41.2%) and explains the dependent variable here. The standard coefficient beta (β) and "F value" are highest of all others analysis above assuring better relationship between the Management deficiencies and development issues of the industry.

Other important issues on the development of bottled water industry

Table 8: Results of regression analysis on other important issues

Independent Variable	**Dependent Variable**			
	Std. coefficient β	**F value**	**Significance (p < 0.05)**	**Adj. R^1**
Financial issues	0.096	0.407	0.527	-0.013
Labor issues	-0.063	0.177	0.676	-0.019
Marketing issues	-0.135	0.823	0.369	-0.004
Technological issues	-0.094	0.395	0.533	-0.014
Environmental issues	-0.202	1.865	0.179	0.019

None of the above variables has significant F statics value (i.e"p" values are greater than 0.05.) Also adjusted R2values are almost zeros and no explanatory power to explain the non-development of the industry. The variance of the dependent variable by the change of the independent is not significant (beta is very small).

Findings, Conclusions and Policy Recommendations

Findings

Based on the survey results it can be concluded that 97% of the bottled water SMEs are sole proprietary enterprises and 57% industries have been in operation for more than 10 years. 24% of SMEs are 5-10 years old. Furthermore, 78% SMEs have less than 10 employees. At present the development of the industry has been on a sluggish phase and mainly concentrated in Western, Wayaba, Central, Uva and Southern Provinces of the country. The main reason for this concentration is the availability of good quality water and the easy access to the market. Raw water used for bottled water needs to meet certain chemical and physical requirements specified by the National Water Supply and Drainage Board to use as drinking or portable water. This is the main reason why this industry is located within these areas. Most of the industries water source are not located on the top of the mountains or amidst fine natural greeneries in the hill country as claimed on the labels or in the advertisements. Approximately 70% of such ventures are situated within the Western, Wayaba and Southern part of the country and use the localized water sources. The demographic situation revealed that most the entrepreneurs were in the age of 30 - 50 years (76% of the total sample population) and 79% of such population was having 10 years or less experience in management and industry . Low industry and management experience means young blood in the industry representing new thinking and actions but also less strategic planning, business norms and business links with the outside world. They always work isolated from the competitive market. Only few bottled water manufacturers, (mostly large scale manufacturers) are associated with Sri Lanka Bottled Water Manufacturers Association. Survey confirmed that many SME level bottled water firms has not heard of this Association. Most SMEs use nearly manual labor (5 to 10 employees) intensive production processes and locally manufactured filtering and purification systems, which is said to be manageable to manufacture SLS specified quality standards to maintain the hygienic conditions properly. But no continuous quality testing and monitoring procedure or methodologies are used in most of the places.

Conclusions

From the findings of the research, the following factors are identified for business sustainability:

- Lack of business relationships among the bottled water SMEs and non-existence of mechanism for informational support, product and process technology issues and various business management deficiencies at firm level.
- Lack of business management skills highly are correlated with the non-development of SME bottled water industry in Sri Lanka.
- Weak unsystematic organizational structure, improper use of human resources, lack of financial resources, less directing and deficiency in production management present in many of the SME level bottled water companies hinder the self-development of such ventures.
- Production cost of a water bottle by a SME manufacture is high compared to large scale operators. Backward integration of production must be thought of for producing necessary secondary products like bottle, cap and labels likewise large scale manufactures.
- Improved manufacturing and production processes includes automated, well defined systematic operation which indeed must to ensure pure hygienic, fully reliable end product.

Policy Recommendations

The study recommends a vigorous promotion of well-structured SMEs development programs. Given the necessary support from stakeholders, policy makers and exporters could make a remarkable difference in easing the plight of SME bottled water manufacturers, as well as that of the overall commercial water industry, in Sri Lanka to its next value added level. Furthermore, this study reveals that there is a tremendous need for development of business management skills in the SME bottled water manufacturers and as well as the other SME industrialist in the country. Government can play major role in assisting SMEs through incentives and tax concessions, various training program, business information provision, technology training, marketing and soft financial schemes. Government development policy should assist SMEs to meet the challenges of globalization and accession to the world markets. To this end, various support schemes have be introduced in the different sectors of SME bottled water industry activities.

The government R & D institutes that have been formed for assisting small and medium scale manufacturers must be more active to transfer necessary products and process technology and other information support to them

International technical exhibitions and trade fairs, education programs on modern bottled water manufacturing processes are necessary to be participated and conducted aiming SME entrepreneurs. It is vital to have a better mechanism to curb unscrupulous activities in the industry.

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Human Resource Management and Globalization in Nepal: A Framework for Future Research

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Abstract

Globalization represents the free flow of human, technology and all kinds of resources across national boundaries generating competitive business environment worldwide. Realizing the facts as human resource is a key for the globalization, the primary objective of this paper is to present a conceptual framework of the study for effective management of human resources as a response to the growing interaction of globalization and business performance. This paper highlights three perspectives: evidence to suggest changes in the global business environment; levels of effectiveness in implementing Strategic Human Resource Management (SHRM) practices; and human resource competencies relevant for implementing such strategic HRM policies and practices. Guided by theoretical perspectives such as the firm's resource-based theory of competitive advantage and empirical evidence, this paper develop research framework for the strategic management of human resources to prepare organizations for the challenges of globalization.

Introduction

Organization of 21st century, especially multinational or global enterprise, faces many challenges to manage their human resources because of operation across national boundaries. These global business organizations are characterized by the free flow of human and financial resources especially from the developed economies of European Union, the North American Free Trade Agreement, the Association of South East Asian Nations, the Economic Community of West African States, and the Southern African Development

Community etc. Emergence of these types of organization and operation without boarder, organizations are opening up new markets in a way that has never been seen before. Therefore, it is urged to manage human resources effectively to gain competitive advantage in the global market place. For this, organizations require an understanding of the factors that can determine the effectiveness of various HR practices and approaches. Because, countries differ along a number of dimensions that influence the attractiveness of Direct Foreign Investments in each country. These differences determine the economic viability of building an operation in a foreign country and they have a particularly strong impact on HRM in that operation.

A number of factors affect HRM in global markets. Some of they are: (1) Culture (2) Economic System (3) Political System – the legal framework and (4) technological innovation and adoption, and (5) Human capital (Noe, et al, 2000: 536). Consistent with the title of the paper, only human capital dimension like skills, capabilities or competencies of the workforce is treated. This is in consonance with the believe that competency-based human resource plans provide a source for gaining competitive advantage and for countries profoundly affect a foreign country's desire to locate or enter that country's market (O'Reilly, 1992).

In the case of developing countries like Nepal, globalization poses distinct challenges to governments and people of the country with their professions like public, private and not for profit entities. These challenges, which must be addressed through a strategic approach to human resource management, include: Partnership in economic recovery; dealing with ethical perspectives on business and labor management; use of latest technology and e-commerce with human competencies; cognitive behavior with positive aptitude, and proper implementation of prescriptions for recovery and growth taking in to consideration the development agenda and unique circumstances of individual country. In this context, a question emerged is what is the appropriate response for businesses in both the developed countries and developing countries like Nepal to address these imminent challenges? These are the prime issues aimed to address by this paper in subsequent sections.

Strategic HRM to Respond Global Challenges

The horizontal integration concept of strategic human resource management involve a set of internally consistent policies and practices related to people management in an organization, where as vertical integration concept designed to link positively between HR strategies and strategic management practices and implemented to ensure that a firm's human capital contribute to

the achievement of its business objectives (Baird & Meshoulam, 1988; Delery & Doty, 1996; Huselid, et al., 1997; Jackson & Schuler, 1995). Schuler (1992: 18) has developed a more comprehensive academic definition of SHRM:

> Strategic human resources management is largely about integration and adaptation. Its concern is to ensure that: (1) human resources (HR) management is fully integrated with the strategy and the strategic needs of the firm; (2) HR policies cohere both across policy areas and across hierarchies; and (3) HR practices are adjusted, accepted, and used by line managers and employees as part of their everyday work.

Wright & McMahan (1992) have developed a comprehensive theoretical framework consisting of six theoretical influences. Four of these influences provide explanations for practices resulting from strategy considerations. These include, among others, the resource-based view of the firm and behavioral view. The two other theories provide explanations for HR practices that are not driven by strategy considerations: (1) Resource Dependence and (1) Institutional Theory.

The resource-based theory of the firm blends concepts from organizational economics and strategic management (Barney, 1991). Traditional sources of competitive advantage such as financial and natural resources, technology and economies of scale can be used to create value. However, the resource-based argument is that these sources are increasingly accessible and easy to imitate. Thus they are less significant for competitive advantage especially in comparison to a complex social structure such as an employment system. If that is so, human resource policies and practices may be an especially important source of sustained competitive advantage (Jackson & Schuler, 1995; Pfeffer, 1994). Specifically, four empirical indicators of the potential of firm resources to generate competitive advantage are: value, rareness, imitability and substitutability (Barney (1991).This theory holds that a firm's resources are key determinants of its competitive advantage. Firms can develop this competitive advantage only by creating value in a way that is difficult for competitors to imitate. In other words, to gain competitive advantage, the resources available to competing firms must be variable among competitors and these resources must be rare (not easily obtained). Three types of resources associated with organizations are (a) physical (plant; technology and equipment; geographic location), (b) human (employees' experience and knowledge), and (c) organizational (structure, systems for planning, monitoring, and controlling activities; social relations within the organization and between the organization and external constituencies). HR

practices greatly influence an organization's human and organizational resources and so can be used to gain competitive advantages (Schuler & MacMillan, 1984)

The second theoretical influence is the behavioral view based on contingency theory. This view explains practices designed to control and influence attitudes and behaviors, and stresses the instrumentality of such practices in achieving strategic objectives. The cybernetic system explains the adoption or abandonment of HR practices resulting from feedback on contributions to strategy. For example, training programs may be adopted to help pursue a strategy and would be subsequently adopted or abandoned based on feedback. The fourth influence, based on transaction costs explains why organizations use control systems such as performance evaluation and reward systems. The argument is that in the absence of performance evaluation systems linked to reward systems, strategies might not be pursued. The other two theories provide explanations for HR practices that are not driven by strategy considerations but based on power and political influences, control of resources (resource-based theory) and expectations of social responsibility (institutional theory) (Greer, 1995: 107-8).

In a nutshell, strategic human resource management can be defined as the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals. In macro perspectives, it appears that strategic human resource management practices are macro-oriented, proactive and long term focused in nature; viewing human resources as assets or investments not expenses; implementation of practices bears linkage to organizational performance; and focusing on the alignment of human resources with firm strategy as a means of gaining competitive advantage. But, the micro perspectives of strategic human resource management intend to manage individual HR practices strategically for overall performance of these practices to lead to organizational performances.

Strategic HRM and Organizational Performance

Many researchers in the fields of strategic human resource management posit that greater use of such practices will always result in better organizational performance (Abowd, 1990; Gerhart and Milkovich, 1990; Huselid, 1995; Leonard, 1990; Terpstra and Rozell, 1993). Leonard (1990) found that organizations having long-term incentive plans for their executives had larger increases in return on equity over a four-year period than did other organizations. Abowd (1990) found that the degree to which managerial compensation was based on an organization's financial performance was

significantly related to future financial performance. Gerhart and Milkovich (1990) found that pay mix was related to financial performance. Organizations with pay plans that included a greater amount of performance contingent pay achieved superior financial performance. In combination, these studies indicate that organizations with stronger pay-for-performance norms achieved better long-term financial performance than did organizations with weaker pay-for-performance norms.

Terpstra and Rozell (1993) posited five "best" staffing practices and found that the use of these practices had a moderate and positive relationship with organizational performance. Finally, Huselid (1995) identified a link between organization-level outcomes and groups of high performance work practices. Instead of focusing on a single practice (e.g., staffing), Huselid assessed the simultaneous use of multiple sophisticated HR practices and concluded that the HR sophistication of an organization was significantly related to turnover, organizational productivity and financial performance. In the case of requisite competencies for HR personnel, emerging evidence from empirical research demonstrates the increasing need for HR personnel to have both HR professional and business-related skills and competencies. A survey of HR executives in the US show that HR managers are spending relatively less time in record keeping and auditing, while their time spent in their activities as a business partner have doubled. The survey also revealed that HR managers believe that their HR staff's most important skill needs are team skills, consultation skills and an understanding of business (Noe, et al., 1997).

Managerial competencies particularly in the HR function bring two advantages to the HR function: (1) Enhance the status of the HR department (Barney & Wright, 1988) (2) Act as important influences on the level of integration between HR management and organization strategy (Golden & Ramanujam, 1985; Ropo, 1993). A study of Singaporean companies found that when HR managers lack the necessary skills to perform their duties competently, line managers and executives take over some of the functions of HR managers (Nee & Khatri, 1999). Research on managerial competencies by Ropo (1993:51) stressed that "the internal dynamism of the HR function serves as the most critical mechanism to keep the integration process going after it has been started under favorable organizational and strategic circumstances". Other studies show that if HR managers can evaluate their priorities and acquire new sets of professional and personal competencies, the HR function would be able to ride the wave of business evolution proudly with other functions in the organization (Becker & Gerhart, 1996; Ulrich, et al., 1995).

Huselid, et al (1997) conducted an elaborate study on 293 firms in the US to evaluate the impact of human resource managers' professional/technical competencies on HR practices and the latter's impact on organizational performance. Results of the study suggest that consistent with the resource-based view of the firm, there exist a significant relationship between SHRM practices and firm performance. They found that (1) HR related competencies and, to a lesser extent, business-related competencies increase the extent of effective implementation of SHRM practices and (2) consistent with recent studies linking HRM activities and firm performance (Arthur, 1994; Cutcher-Gershenfeld, 1991; Huselid, 1995; Huselid & Becker, 1996; MacDuffie, 1995), the study support the argument that investments in human resources are a potential source of competitive advantage.

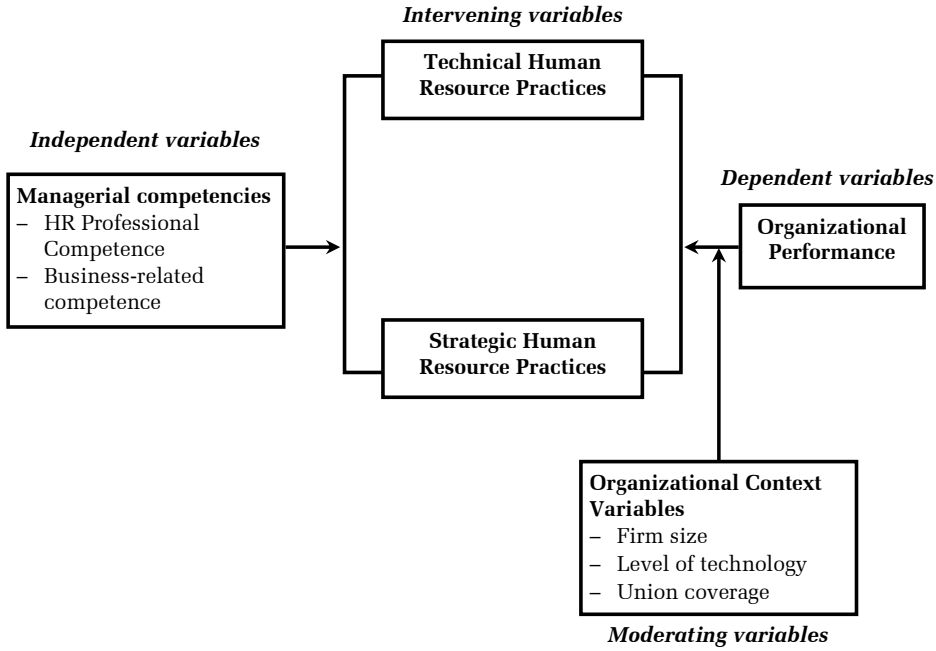
Recent reviews of theoretical and empirical literature (Juhary Ali & Bawa, 1999; Irwin, et al., 1998; Jackson & Schuler, 1995) suggest that a variety of factors affect the relationship between HRM and firm performance. These factors include firm size, technology and union coverage. The influence of firm size on HRM practices is fully documented in theoretical and empirical studies. For example, institutional theory suggests that larger organizations should adopt more sophisticated and socially responsive HRM practices because they are more visible and are under more pressure to gain legitimacy. Many empirical studies show that firm size is an important variable influencing HRM practices (Ng and Maki, 1993; Wagar, 1998). There are emerging evidences that HR practices may differ in organizations depending on the level of technological sophistication in terms of training (Majchrzak, 1988), performance appraisal (Ouchi, 1977, 1980; Snell, 1992) and reward systems (Kaus, 1990; Snell & Dean, 1992). Theoretical and empirical studies also support the position that the presence of specific HRM practices may differ based on the union coverage of a firm (Ng & Maki, 1993, Wagar, 1998; Lawler & Mohrman 1987).

Framework and Propositions

Some of the propositions and research framework can be designed based on the above discussions. (a) There is a significant relationship between strategic HRM practices and firm performance (low employee turnover, high productivity and high profitability (Huselid, et al., 1997). (b) It is also clear that there exist low incidence of implementing SHRM practices relative to technical HRM practices (Huselid, et al., 1997; Wright & McMahan, 1992). (c) Both HR professional competence and knowledge of the business (business related competence) significantly contribute to the extent of implementing

SHRM Practices (d) The incidence of implementing strategic HR practices is lower in organizations especially in the developing countries like Nepal. (e) Finally, environmental context variables like firm size, technology and union status affect the extent of implementing HRM practices (Jackson & Schuler, 1995; Snell & Dean, 1992; Wagar, 1998). The relationships discussed above are presented in the figure below and relevant propositions derived. This theoretical framework is in keeping with the thinking of a number of authors including Delery & Doty (1996), Huselid, et al. (1997), Jackson & Schuler (1995) and Wright & McMahan (1992).

Theoretical Framework for Human Resource Management



These propositions will help us organize thought on the level of readiness (and otherwise) of organizations in response to the challenges of the global business environment. It may be pertinent to point out here that the six propositions derived from the framework are particularly relevant for giving insights into the HRM challenges facing organizations in the new era globalization. In other words, For example, if HR personnel especially in developing countries demonstrates higher levels of HR professional competence relative to the business-related competence (as found in the literature), it would be important to set right this wrong as a stepping stone for succeeding in global business. This is because to succeed in the new era of globalization, the human factor is central. That is why it is necessary for HR

personnel to prove themselves beyond reasonable doubt that they are capable of playing key roles in enhancing the status of the HR department (Barney & Wright, 1988), must possess a thorough understanding of business (Noe, et al., 1997) and also act as important influences in the level of integration between HR management and organizational strategy (Golden & Ramanujam, 1985; Ropo, 1993).

The HR professional competence describes the state-of-the-art HR knowledge, expertise and skill relevant for performing excellently within a traditional HR functional department such as recruitment and selection, training, compensation, etc. This competence insures that technical HR knowledge is both present and used within a firm (Huselid, et al., 1997). Business-related competence refers to the amount of business experience HR personnel have had outside the functional HR specialty. These capabilities should facilitate the selection and implementation of HRM policies and practices that fit the unique characteristics of a firm including its size, strategy, structure, and culture (Jackson & Schuler, 1995). In other words, these competencies will enable the HR staff to know the company's business and understand its economic and financial capabilities necessary for making logical decisions that support the company's strategic plan based on the most accurate information possible.

With its implicit systems perspective, the resource-based view suggests the importance of "complementary resources", the notion that individual policies or practices "have limited ability to generate competitive advantage" (Barney, 1995:56). This idea, that a system of HR practices may be more than the sum of the parts, appears to be consistent with discussions of synergy, configurations, contingency factors, external and internal fit, holistic approach, etc (Delery & Doty, 1996; Huselid, 1995). Drawing on the theoretical works of Osterman (1987), Sonnenfeld & Peiperl (1988), Kerr and Slocum (1987) and Miles & Snow (1984), Delery & Doty (1996) identified seven practices that are consistently considered strategic HR practices.

Conclusions

The aim of this paper is to set out as a contribution to the current discourse on the interaction of globalization and business performance especially with a flavor of the challenges from the perspectives of developing countries like Nepal and suggest some propositions and research framework for future research so that the challenges of globalization can be addressed. This paper presents a framework for Strategic Human Resource Management as a response to prepare organizations for the challenges of globalization. It has

been observed that by and large organizations have achieved relatively low levels of effectiveness in implementing Strategic Human Resource Management (SHRM) practices (Huselid, et al., 1997). If the propositions outlined above are supported, then the real challenge for organizations in the era of globalization is to pay particular emphasis to strengthening their human resources by upgrading the relevant competencies.

In this 21st century, governments and corporate bodies brace up for the new millennium characterized by an ever-increasing global challenge, developing countries have no choice but to develop and continuously upgrade the human resource and business competencies of their workforce. In the case of developing countries, distinct competencies are important to deal with not only the HR issues but also others including partnerships in economic recovery especially in Nepal. Addressing these issues is a necessary step towards facing the challenges of globalization in to the next millennium.

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A Step Forward for Research in Management



The British College and the Nepalese Academy of Management (NAM) signed a Memorandum of Understanding to ensure the promotion and development of management research in Nepal. Both, The British College and The Nepalese Academy of Management, will work closely together to: promote and nurture the development of knowledge locally and globally; provide forums for academics to present and publish research; promote the development of research and education activities throughout Nepal, and develop networks nationally as well as internationally for knowledge management consortium.

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