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   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

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BOOKS

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- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

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- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

CONCEPTUAL UNDERSTANDING OF THE ROLE OF HUMAN RESOURCE DEVELOPMENT IN ROAD SAFETY

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ABSTRACT
Human resource development (HRD) involves improving the knowledge, skills and attitude of people for personal growth and excellence. Using the same analogy of HRD, it can be applied to safety management on the roads. People can be taught the knowledge, skills and attitude required for the safe use of roads. It is very important because the analysis of the various causes of road accidents clearly demonstrates the preponderant role played by the human factor. This aspect thus constitutes a fundamental component of danger on the roads and has become even more important in relative terms due to the significant progress achieved in recent years in the other relevant spheres of action which are traditionally, the improvement of the road network and of the designing safe vehicles. Road users include, pedestrians, luggage carriers, horse riders, bullock carts as well as those who ride bicycles, tricycles, motorized two wheelers, cars, vans, trucks, tractors, and buses.

KEYWORDS
Driving skills, Road user, Safe driving, Human errors.

INTRODUCTION
People are fundamentally mobile by nature. In the Stone Age they moved from place to place walking bare foot. In the Agrarian Age they domesticated animals like camel, horse, cow and donkey to use them as means of transportation. Road transportation is by far the commonest means of transportation compared to others like air, rail and water. Most often people use roads as the means to reach the destination. Therefore safety on the road is of paramount importance for the wellbeing of individual and the society. People often believe that driving skills and knowledge about driving are all that is needed for them to be safe on the roads. However, one of the most important influences on driving ability is their attitude towards driving and the resultant behaviour on the road. Even if we are driving rightly the mistake of other road users can engage us into a road crash. The adverse consequences of road crashes are tragic both in terms of death and injury to road users and damage to economic assets. Road crashes are manmade and preventable. Training road users for the knowledge, skills and attitude required for safety can go a long way in promoting accident free roads.

The first road traffic accident death was reported on 17th August 1896 at London (Andrews, 2010). Bridget Driscoll was a 44-year old mother with two children who had come to London with her teenage daughter and a friend to watch a dancing display. The crash occurred on a terrace in the grounds of Crystal Palace in London, and while the driver was reported to be doing four miles per hour, witnesses described her at being hit by a car travelling at tremendous speed. She died minutes later of head injuries. The car was owned by the Anglo-French Motor Car Company Roger-Benz who were offering demonstration rides to the public. At the time of the crash, the car was being driven by Arthur Edsell, an employee of the company. He had been driving for only three weeks and no driving tests or licenses existed at that time. He had apparently tampered with the belt, causing the car to go at twice the intended speed and was also said to have been talking to the young lady passenger beside him. After a six-hour inquest, the jury returned a verdict of Accidental Death. No prosecution was proposed or brought against the driver or the company. At the inquest into this death, the coroner was reported to have said "this must never happen again".

More than a century later, 1.2 million people are killed on roads every year and up to 50 million more are injured. Road accident is most unwanted thing to happen to a road user, though they happen quite often. Attitudes towards the road environment and driving can impact the driving behaviour. Unfortunately, an increasing number of road traffic incidents are being caused by aggressive drivers. But most of the drivers don't learn from their mistakes on road. Generally road users are aware of the general rules and safety measures while using roads but it is only the laxity on their part which cause accidents and crashes. Hence the main cause of accidents and crashes is the human error.

Throughout the world, roads are bustling with cars, buses, trucks, motorcycles, mopeds and other types of vehicles for the transportation of goods and people. By making the transportation of goods and people faster and more efficient, these vehicles support economic and social development of the society. While motorized travel provides many benefits, it can also cause serious harm unless safety is made a priority. Pedestrians and cyclists using roads are particularly at risk. If current trends continue, the number of people killed and injured on the world's roads will rise by more than 60% between 2000 and 2020. Most of these injuries will occur in developing countries where more and more people are using motorized transport. In these countries, cyclists, motorcyclists, users of public transport, and pedestrians are especially vulnerable to road traffic injuries Road accident casualties will increase if preventive action is not taken.

THE CHALLENGE OF ROAD SAFETY
Road traffic crashes are one of the world's largest public health and injury prevention problems. The problem is all the more acute because the victims are overwhelmingly healthy prior to their crashes. Hence appropriate road traffic safety measures are required to be put in place. Road traffic safety refers to methods and measures for reducing the risk of a person using the road network being killed or seriously injured (ITF, 2008). The users of a road include pedestrians, cyclists, motorists, their passengers, and passengers of on-road public transport, mainly buses and trams. Best-practice road safety strategies focus upon the prevention of serious injury and death crashes in spite of human fallibility which is contrasted with the old road safety paradigm of simply reducing crashes assuming road user compliance with traffic regulations.

Road accident is an event of collision,overturning or slipping which occur or originate on a road open to public traffic resulting in either injury or loss of life or damage to property in which at least one moving vehicle was involved (Shivakumar & Krishnaraj, 2013). Most of the fatal accidents occur due to over speeding. It is a natural psyche of humans to excel. If given a chance man is sure to achieve infinity in speed. But when we are sharing the road with other users we will always remain behind some or other vehicle. Increase in speed multiplies the risk of accident and severity of injury during accident. Faster vehicles are more prone to accident than the slower one and the severity of accident will also be more in case of faster vehicles.

Young novice drivers are overrepresented in road accidents. Although they quickly acquire the skills needed to control a motor vehicle, it takes much longer for novice drivers to develop the higher-order perceptual and cognitive skills necessary to safely interact with the driving environment (Deery, 1999). Motorized two-wheeler riders in Bangalore city constitute the largest share of fatalities (40%) and cyclists account for about 10 percent. However, if the probability of a fatal crash is calculated per million km of a particular mode, then the cyclists are about six times more vulnerable compared to motorized two-wheelers. This may be because there are no separate bicycle lanes on arterial roads and bicyclists have to share the left lane with buses (Kharola, Tiwari & Mohan, 2012).

GLOBAL TRENDS

Road accidents are a leading cause of death and injury worldwide. By 2020, WHO (2012) projects that road crash injuries will be the third highest threat to public health, outranking other serious health problems such as tuberculosis, diarrheal diseases, HIV/AIDS, and lower respiratory infections. According to a survey from WHO (2012), each year road traffic injuries take away lives of 1.2 million men, women, and children around the globe and injure many more. In South Asia, road traffic fatalities are expected to increase from 135,000 in 2000 to 330,000 in 2020 (WHO, 2004). That's a 144 percent increase in deaths from road crashes. Accidents are particularly high in low and middle income countries and around 85 percent of the world's road deaths occur in developing countries. The South Asia region has a one fifth share in these fatalities.

Several international organizations are doing their best to improve road travel safety (World Bank, 2013). The World Bank has implemented various measures on road safety in South Asia, and around the world. In 1999, it has also helped to initiate the Global Road Safety Partnership, a unique coalition of business, civil society, and governmental organizations working together to improve road safety around the world in the following manner.

World Bank supported projects in South Asia have focused on helping regional governments to improve policies and regulations and establish road safety agencies. In India, Bangladesh, and Pakistan, the Bank has assisted government agencies in developing comprehensive road safety action plans, at both the national and state level as well as for specific cities like Dhaka and Lahore. The Bank has also assisted in projects which include the development of manuals for safety audit, accident black spot investigations, road signs and markings, and computerized accident recording and analysis systems.

Public awareness campaigns are a key part of the World Bank's efforts to improve road safety; one such project has been created for the National Highway Authority of India. In these efforts, the NGO's have played a vital role. For instance in Bangladesh, NGO's have undertaken comprehensive road safety education and public information campaigns in local communities with the support of the World Bank.

Technical assistance has also focused on designing and constructing better and safer roads. In India, the Bank has assisted in improving hazardous locations on the national highway and state highways, as well as the installation of safer road features and devices. In Bangladesh and the Indian states of Andhra Pradesh, Karnataka, Gujarat, Kerala and Uttar Pradesh, it has provided funding for improvements of accident black spots, installation of reflective traffic signs and road markings.

The Year 2011 was marked by the launch on 11 May 2011 of the United Nations Decade of Action (2011-2020) for Road Safety. On this occasion, the UN Secretary General, Mr. Ban Ki-Moon, called on UN Member states, international agencies, civil society organizations, businesses and community leaders to ensure that the Decade leads to real improvement, and recommended governments to develop national action plans for 2011-2020. In this regard the Indian Government is taking several actions to counter the ever increasing road accidental fatalities.

There are solutions to the road safety problem. A wide range of effective interventions exist, and experience in countries with long histories of motorized travel has shown that a scientific, "systems approach" to road safety is essential to tackling the problem. This approach addresses the traffic system as a whole and looks at the interactions between vehicles, road users and the road infrastructure to identify solutions. There is no single blueprint for road safety. Interventions and strategies that work in one setting may need to be adapted elsewhere.

CONCERN ON THE INDIAN ROADS

The death toll is on the higher side for the countries like India where pedestrians, motorcyclists and passengers are vulnerable and vehicles lack the safety norms. It has a road traffic fatality rate of 16.8 deaths per 100000 population. Approximately half of all deaths on the country's roads are among vulnerable road users like motorcyclists, pedestrians and cyclists.

Though there are laws on driving training, speed, seatbelt wearing, helmet wearing, and drunk-driving, they are poorly enforced. As the nation's economy grows, the number of motor vehicles increase. This means death and injury from traffic accidents are likely to increase, since motorized traffic competes with slower moving non-motorized traffic for road space, especially if measures are not taken to mitigate the problem. In South Asia, motorized traffic has been increasing at a rapid pace, typically over 10 percent annually in major urban areas.

India has the second largest road network in the world with over 3 million km of roads of which 60% are paved. These roads make a vital contribution to the India's economy. On the whole, the facilities for the road users are not up to the mark, leading to large number of accidents. Recently, there is a growing concern over the road crash problem. With the advancement of technology, the most developed projects undertaken along with the real estate are the massive road building projects. While new roads are being built, fast moving vehicles are introduced by automobile manufacturers. Indians are economically progressing in the developing economy and hence more and more people are buying their own vehicles rather than using public transport system which is one of the causes of road congestion and resultant accidents.

Road accidents disproportionately affect the poor, making road safety an economic development imperative. Most of the victims of road accidents aren't even in a motor vehicle. Pedestrians, cyclists and motorcycle riders are the most vulnerable road users and account for the majority of traffic deaths in low and middle income countries. According to World Bank (2013) in Dhaka city, Bangladesh, pedestrians alone comprise almost 75 percent of road accident fatalities. In New Delhi, pedestrians and bicyclists account for around 55 percent, and pedestrians, bicyclists and motor cyclists account for over 80 percent of the total road traffic deaths. The pattern is similar in Colombo, Sri Lanka, where the figures are 45 percent and 80 percent respectively.

The shortage of safe and affordable travel options make things even worse for the poor. Long distance buses are often overcrowded. It is not unusual to see passengers riding on bus roofs increasing the chance of an accident, and risking many lives at once. Road accidents are an economic burden, and pose a major challenge to the health care system. The economic cost of road crashes and injuries is estimated to be 1 to 1.5 percent of gross national product (GNP) for low and middle income countries, about US$ 65 billion which is more than they receive in development assistance. Critical and often scarce health care resources get consumed by road crash cases. This hurts a country's ability to respond to other health care needs. Road traffic injuries also place a heavy burden on the household finances of the victims and their families. Many families are driven deeply into poverty by the loss of a breadwinner and the added burden of disabled members.

In India road safety is an issue of grave national concern. While improvements in technology may help you drive safely the best way to reduce accidents is to inculcate safe driving habits. Road traffic injuries (RTIs) are one of the leading causes of deaths, disabilities and hospitalizations with severe socioeconomic costs. World Health Statistics 2008 cited in Global Status Report on Road Safety states that at current rates by 2030, RTIs are expected to be the 5th leading cause of death, overtaking diabetes and HIV/AIDS. The report also states that more people die in road accidents in India than anywhere else in the world, including the more populous China.

National Crime Records Bureau (NCRB) of India revealed that at least 13 people die every hour in road accidents in the country. As per statistics there is one road accident every minute and, an accident related death every four minutes in India. Karnataka has the third highest accident rate in India, behind Tamil Nadu and Maharashtra. NCRB states that in the year 2012, in Bangalore alone there were a total of 5502 road traffic accidents with more than 4500 causalities and 700 deaths.

Road traffic on India's more than 3.3 million-kilometre road network, one of the largest in the world, had been increasing by more than 10 per cent annually since 2000. National highways made up only 2 per cent of the network, but carried 40 per cent of the total road traffic, resulting in heavy traffic density. Conscious of the serious development and national health impact of road accidents, India had been working actively to enhance road safety and reduce the adverse consequences of accidents. It had already followed the WHO recommendation to create a lead agency for road safety issues namely the Department of Road Transport and Highways, which formulated road safety policies, and had also created a National Policy on Road Safety in addition to implementing an Annual Road Safety Plan (Sen, 2008). India has collected and analyzed road accident statistics and took steps to further develop a road safety culture by organizing awareness campaigns in collaboration with civil society organizations.

Engineering, enforcement and education are the three aspects of road safety on which India is taking action. The country had signed the 1998 Agreement of the World Forum for Harmonization of Vehicle Regulations in order to adopt international best practices in motor vehicle safety. Smart card-based driving licences and vehicle registration certificates are being issued in many parts of the country, while old laws and regulations are being reviewed and updated. Extensive public awareness campaigns, involving non-governmental organizations and other stakeholders, are organized periodically, as were annual road safety weeks with such themes as "Drive to care! Not to dare!."

The NCRB Report 2012, provides startling revelation of accidental deaths in general and road accident deaths in particular as under. During the year 2012, a total 3,94,982 accidental deaths were reported in the country. Out of which 6,99,804 cases of un-natural accidents which caused 3,72,022 deaths and rendered 5,07,329 people injured were reported in country during 2012. The ratio of male fatality to female fatality due to unnatural accidents was 77.6: 22.4. There is 1.0% increase in accidental deaths during 2012 over the previous year. There is 3.1% decrease in deaths by causes attributable to nature from 23,690 in 2011 to 22,960 in 2012. There is 1.3% increase in deaths by unnatural causes from 3,67,194 in 2011 to 3,72,022 in 2012.

Maharashtra accounting for 9.4% of country's population has reported almost one-sixth (15.7%) of accidental deaths followed by Madhya Pradesh and Tamil Nadu accounting for 6.1% and 5.6% respectively of the country's population. Males out-numbered females in all kinds of accidental casualties due to unnatural causes at the national level except fire accidents (where 66.4% of those killed were females as compared to 33.6% males). The major unnatural causes of accidental deaths were road accidents (37.4%), poisoning (8.3%), railway accidents and rail-road accidents (7.9%), sudden deaths (7.8%), drowning (7.4%) and fire accidents (6.3%).

A total of 4,73,416 *traffic accidents* were reported during the year 2012,comprising 4,40,042 road accidents, 1,762 rail-road accidents and 31,612 other railway accidents. It is observed that the rate of deaths per thousand vehicles has decreased from 1.3 in 2008 to 1.0 in 2012. Maximum number of traffic accidents occurred in the month of May (38,920) and during 15 hours to 18 hours (73,672). 69.6%, 67.5%, 53.5% and 51.9% of unnatural deaths in Jammu & Kashmir, Nagaland, Uttar Pradesh and Andhra Pradesh respectively were reported due to road accident.

Deaths due to road accidents in the country have increased by 1.3% during 2012 over 2011. 23.2% victims of road accidents were occupants of two wheelers. Rate of accidental deaths per thousand vehicles was highest in Bihar and West Bengal at 1.9 each followed by Andhra Pradesh and Himachal Pradesh at 1.5 each. The month wise distribution of road accidents has shown maximum number of accidents during May (38,920) followed by April (38,474) while least number of road accidents were reported in the month of September (33,224). Maximum number of road accidents (73,672) was reported during 15 hours to 18 hours. Maximum 'rail-road accidents' occurred during the months of February (171). The maximum number of 'railway accidents' were reported during the months of May (2,827) followed by August and October (2,741 each).

Among 53 mega cities, 97.6% and 81.2% of deaths were reported due to road accident in Lucknow and Asansol respectively. Delhi city accounted for 16.1% deaths of pedestrians, 10.0% deaths due to car accidents and 9.5% deaths due to two wheelers, amongst 53 mega cities. Kolkata, the third largest city in terms of population (8.8% of the population of all mega cities), among 53 cities, after Mumbai (11.4%) and Delhi city (10.1%) reported accidental death rate of 5.6 as compared to 41.6 reported in Mumbai and 43.2 reported in Delhi city.

CONSEQUENCES OF UNSAFE ROADS

Road safety is emerging as a major social concern in India. India has the second largest road network in the world with over 3 million kilometers of which 60% are paved. These roads make a vital contribution to the India's economy. On the whole, the facilities for the road users are not up to the mark, leading to higher rate of road accidents. With the advancement of technology, the most developed projects undertaken along with the real estate are the massive road building projects. But while new roads are being built, high speed automobiles are being invented making road safety a crucial question.

Road accidents disproportionately affect the poor, making road safety an economic development imperative. Most of the victims of road accidents aren't even in a motor vehicle. Pedestrians, cyclists and motorcycle riders are the most vulnerable road users and account for the majority of traffic deaths in low and middle income countries. In Dhaka city, Bangladesh, pedestrians alone comprise almost 75 percent of road accident fatalities. In Delhi, India, pedestrians and bicyclists account for around 55 percent, and pedestrians, bicyclists and motor cyclists account for over 80 percent of the total road traffic deaths. The pattern is similar in Colombo, Sri Lanka, where the figures are 45 percent and 80 percent respectively.

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ROLE OF HUMAN RESOURCE DEVELOPMENT

In India only the motorized road users are required to undergo formal training on driving skills, but gives very little attention in inculcating the knowledge required for safe driving and the attitude needed for safety is not taught at all. It is true that behaviour patterns can be influenced indirectly, as for example by physical changes to roads or their environment. However, although this approach can achieve highly favourable results, it would seem sufficient in only a very few instances. Influencing the behaviour of road users is critical if we have to prevent death and serious injury on our roads. The reality is that if people obeyed speed limits, didn't drink or take drugs and drive, wore a seatbelt helmet and were not distracted when driving the road safety would improve significantly. It is therefore vital to change the behaviour of road users by learning and development interventions.

When considering remedial measures to reduce accidents it must be borne in mind that the most effective remedy is not necessarily related directly to the main "cause of the accident and may even lie in different categories of road, vehicle or road user. This is particularly true of accidents in which the road user fails to correctly analyse all the factors in the road environment; in many accidents the primary cause may be said to be the driver's lack of skill or ability, but engineering remedies to improve the road or to make it safer are often cheaper, easier to effect and have a proven track record.

But training the driver to the necessary degree of skill for all circumstances is extremely difficult. Further, even in circumstances in which human error or the physical state of the driver has been judged to be the sole contributor, it may be possible to influence human behaviour more readily by engineering means than by education or enforcement of legislation. This is not to say that attempts to influence human behaviour within a given infrastructure should not be pursued. Although it is the most difficult area to effect safety measures, when achieved the result can be most dramatic. In sum, an analysis of the various accident factors demonstrates that human factors are highly preponderant, even though a good number of accidents result from a complex of causes. However, uniform or unilateral measures do not always lead to decisive solutions to the problems encountered.

SUGGESTIONS AND RECOMMENDATIONS

Therefore, there is a need to: define global strategies covering education, the technical improvement of the road environment, information, regulations, controls and sanctions; aim the measures selected at the relevant targets, i.e. the different categories of user and take better account of regional and local accident realities in order to formulate more effective prevention programmes. Traffic safety education has always been regarded as a way of influencing the behaviour of road users. Traditional education programmes have mainly been directed at children, young people and prospective holders of driving licenses. During recent times, traffic safety education has acquired a wider perspective and it is now viewed as an integrated whole.

Traffic safety education should be both theoretical and practical. Practical training is a very important form of road safety education. In its broadest sense, traffic safety education also includes information measures (dealt with in the following chapter) and further education measures (retraining and refresher courses) following basic training. Road safety measures fail into three main categories: improving road user behavior (by means of education, information, regulation, monitoring and supervision, and penalties), improving vehicle safety, and developing safer road infrastructures. All contribute in their own way to reducing accidents and casualties. The extent to which they do so depends on the key factors in accident causation. Measures aimed at safety improvement must take account of how susceptible a particular factor may be to influence and change. In general, changes in road layout – "safety engineering" – have a more immediate and quantifiable effect on accidents than attempts to change behaviour by publicity.

Managing safer road transportation in India is a complex problem requiring multi prolonged strategies succeed. The aspects of both driving skill and driving style appear to contribute to road accident risk. Of the former, hazard-perception latency appears to play an important role, and this may be attributable to generalized abilities to identify visual targets in a complex background and to switch attention rapidly. Of the latter, faster driving speed and willingness to commit driving violations increase crash risk, and these factors may be explicable in terms of personality and antisocial motivation.

According to IRTE (2012) out of the estimated 1.4 million serious road accidents/collisions occurring annually in India, hardly 0.4 million are recorded. Further, only a minimal percentage of these collisions are scientifically investigated, in the absence of which, the real causes and consequences are never known. Therefore remedial measures as well as punishment for the violators are also arbitrary. On account of various political and socio-economic conditions, generally, the larger vehicles are often labeled the culprit in cases of vehicle-to-vehicle crashes. Road safety can only be improved when we understand the causes and consequences of road accidents/collisions so as to work out remedial measures.

Drivers sometimes find themselves at the wheel following a happy or unhappy event related to their work or their social and family life. Differences in the allocation of attention, changes in a decision or in the carrying out of a decision can therefore occur. These effects might be understood in the light of motivational consequences of loss of control.

Behavioural adaptation has been a focal concept in traffic psychology since the mid 1970's. Much effort has been used to define it, and many models have been devised to describe and explain it. However, these attempts sometimes are at risk of confusing the general phenomenon and mechanisms underlying it. This paper defines the behavioural adaptation as a tendency of the driver to react to changes in the traffic system, whether they be in the vehicle, in the road environment, in road and weather conditions, or in his/her own skills or states, and that this reaction occurs in accordance with his/her motives. Very obviously, this kind of adaptive behaviour occurs at many levels of the functional hierarchy of driver behaviour.

Therefore, risk-related behaviour should be considered at several levels with different mechanisms to produce behavioural adaptation, often called 'risk compensation'. At a high level, trip decisions modify populations at risk in different circumstances, sometimes calming and sometimes amplifying population risk differences. For example, elderly drivers tend to avoid difficult conditions and succeed in keeping the fatality risk per person at a moderate level, while young male drivers at the other end of the continuum use cars very dangerously at nights on weekends.

At a low level of vehicle control and guidance in real dynamic traffic situations, simpler control mechanisms which result in behavioural adaptation can be identified. Among these mechanisms, maintenance of safety margins and proper attention allocation play a major role. All these effects influence the end result of accident risk as separate mechanisms.

Young drivers' accident involvement may be explained by a number of different factors, one of which is that they tend to overestimate their skill in driving a car. Attitudes toward traffic safety are directly associated with risky driving behaviors while having direct effects on attitudes toward traffic safety, personality traits are also found to influence risky driving behaviors indirectly mediated by traffic safety attitudes.

In considering the human contribution to accidents, it seems necessary to make a distinction between errors and violations; two forms of aberration which may have different psychological origins and demand different modes of remediation. While errors are unintended lapses; violations are intentionally committed with the full knowledge of consequences.

WHO (2012), report states that the need for more tension, risk and adventure in their lives (people having high risk personality) exhibit a driving style characterized by such actions as travelling at excessive speeds and carelessly changing lanes. Subjects who report taking more risks for its arousal and pleasurable sensation are more frequently convicted of speeding violations and other traffic violations.

The human and economic damage caused by road crashes is largely preventable (World Bank, 2013). Flaws in road design and engineering, coupled with driver behavior, can be overcome with concerted effort. In South Asia, governments so far have been slow to cope with the growing level of traffic. Setting up agencies with a separate budget and the power to enforce regulations to address road safety at an institutional level would be an important step forward.

Lack of awareness and consciousness about road safety among road users, planners and engineers, exacerbates the problem. Drivers, for instance, are often not conscious of the inherent risks of high travel speeds, and overcrowded passenger buses. This problem can be mitigated with public awareness campaigns, improved driver training and testing, and better trained enforcement personnel and engineers. Standardizing the collection of collision data can also bridge a very significant informational gap.

Road safety audits should be introduced by road agencies as an important crash prevention measure. Important design and traffic calming measures such as median drivers, speed bumps, rumble strips, road markings, traffic signs, and roundabouts are usually not present in most of these countries. Moreover, because much of the traffic in developing countries consists not of motorized vehicles but rather bicycles and pedestrians, the building of separate non-motorized traffic and motorcycle lanes to ensure the smooth flow of traffic and a safe environment is very important.

Improving road travel safety in India will therefore require several measures like (1) training of drivers both in (a) technical aspects of driving as well as (b) empathetic understanding of the harm caused to the victims; (2) effective enforcement of safety norms by education, implementation and punitive measures; (3) incorporating safety devices in vehicles; (4) recognizing safe driving behaviour; (5) providing suitable footpaths and pedestrian crossing for those do not travel in vehicles, and (6) building and maintaining proper road infrastructure

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COSMETIC CONSUMPTION PATTERN AMONG MALE COLLEGE STUDENTS: A CLUSTER ANALYTIC SEGMENTATION APPROACH

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ABSTRACT

Usage of cosmetics among young men is on the increase. Personal care product manufacturers are targeting their products, promotion and distribution increasingly to this growing market. It will be useful to segment this market and understand the behaviour of each segment with respect to consumer behaviour variables. This research work conducted among college male students by surveying a sample of 80 respondents attempted to segment the market using cluster analysis using usage and benefit variables. The analysis resulted in formation of three clusters (Medium self-directed, Heavy other-directed, and Occasional non-believers) with varying characteristics. The usage and attitude of the clusters were found to differ significantly. The first cluster had medium usage with self directed attitude and medium perception of benefits. The second cluster had heavy usage with other directed attitude and high benefit perception. The third cluster had light usage with self directed attitude and low benefit perception. The clusters were found to differ in place of residence with medium self directed and occasional non believers having higher percentage of rural students while heavy other directed had higher representation of urban students. While brand preference for body spray was found to vary by cluster brand preference for face wash, shaving cream and face cream was not varying by cluster. Other variables of interest to marketer like outlet choice, reasons for use and considerations in buying were not found to vary by cluster membership. Surprisingly enough, skin type was not varying by cluster. Interestingly, heavy other directed were the lowest spenders with average spending of Rs. 684 and medium self directed were medium spenders with Rs. 950 and occasional non believers were the highest spenders with Rs. 2221 per month. The findings are of theoretical and practical significance.

KEYWORDS
Men cosmetics, Usage, Attitude, Benefit perception, Profiling variables.

INTRODUCTION

Use of cosmetics is not a recent phenomenon but it has its roots deep within the annals of history. The word cosmetic has been given this modern name lately. Though formal use of cosmetics has gained momentum relatively late, it has been in existence in some form or other for a long time. To cite an example of the long usage of cosmetic, the cosmetics depict had found its origin in the 4th century BC. India too has not remained far behind in the development and frequent usage of cosmetics. Household items like haldi, chandan, basan uptoon have been used centuries to preserve the natural beauty of skin. The cosmetics industry, which started growing in the early 1990s, is expanding exponentially. With more women and men becoming conscious of their beauty and willing to spend on their grooming, this industry has been growing at 20-25 percent the last few years. No wonder then that the shelves are stocked with a plethora of products and brands, targeted at various segments, catering to the various needs of customers. The enormous growth in this segment has not only attracted many MNCs but also provided space for many Indian companies to foray or expand their product range.

An ORG-Marg study reveals that while most FMCG products were affected by the general slowdown, this segment witnessed relatively good growth in volume and value. Not only have more people started using cosmetics, they are also willing to pay more to look and feel good. The penetration rate is higher in the skin-care segment compared to lipstick. This not only means that consumers are willing to spend the extra bit to look and feel good, but also indicates the constant up gradation from mass to premium products. Though mass products still constitute a major portion of the market, a certain segment is obviously ready to upgrade to the next category as disposable income rises, increased media exposure and the willingness to spend more on personal care, consciousness about looks, and advertisements and promotions targeting various consumer segments are some reasons for these trends in consumption and penetration. The growth trends definitely send positive signals about the industry prospects. With numerous players fighting for market share, is the industry really big enough and the growth high enough?

Though most players see huge opportunity in this industry, what would actually work wonders for the players is strong brand promotion, good distribution network, constant innovation and quality improvement, the ability to provide a variety of products and introduce affordable products without compromising on quality. Cosmetics are still seen as elitist products and may be the last thing on an average Indian consumer's mind. Though the low penetration levels for most cosmetics products suggest much potential, the market for cosmetic products may remain a niche market, accessed by a small proportion of the consumers. The cosmetic segment primarily comprises of colour cosmetics (face, eye, lip and nail care products), perfumes, talcum powder and deodorants. All this are very small segments. Talcum powder is the most popular cosmetic product in India. This market is estimated at Rs. 3.5 bn and is yet growing at 10-12 % in pa. Awareness is very 80% with a penetration of 45.4 % in urban areas and 25.2 % in rural areas.

Historically, being concerned about appearance was stereotypically associated with women. Now masculinities too have become embedded in appearance norms. Consequently men too are increasingly concerned about their appearance. Male skin care is one of the beauty industry's fastest-growing sectors, with more men adopting a grooming regimen, alongside exercise and eating right, as a component of healthy living." Also, a Nielsen study shows that the skin creams segment in male grooming grew at 41%—much faster than the overall skin cream category in India, which grew at 27%. Interestingly, men in India today— and especially those who fall in the age group of 18 to 25—spend more money on grooming and personal care products than women in India. Nilanjan Mukherjee, head of marketing, personal care products business, ITC Limited, comments, "The aspirations and requirements of today's young Indian men are rapidly evolving. With a surge in disposable income, men are becoming more discerning and indulgent. In an evolving trend in India, men are beginning to look at innovative grooming and personal care products created specifically for them. The segment shows immense promise and is growing faster than the overall personal care market in India." According to a recent study by Indian industry body ASSOCHAM (Association of Chambers of Commerce), Indian men spend approximately $100 more than women in personal care products. Also, many men—an ASSOCHAM study shows 85%—prefer to buy their own grooming products, and do not rely on the women in their households to do so.

LITERATURE REVIEW

Modern men, it seems, are fascinated with their appearance, investing time and money in their personal appearance, through diet and lifestyle choices, fitness regimes, and the purchase of consumer goods, including clothing, accessories, and cosmetics. Between 2002 and 2006, the UK market for men's grooming products tripled to £781m (Mintel, 2007). Britain's second-largest beauty and health retailer Superdrug (2010) estimates the current male grooming market to be "worth an estimated £1.2 billion a year in the UK" (p. 1). Even in the current economic climate, analysts are forecasting a healthy 5 percent growth rate in the market (Mintel, 2010). Moreover, Superdrug (1) claims that men are now dedicating "83 minutes of every day to their personal grooming" (p. 1), some four minutes longer than the average woman's daily beautification regime. It seems then that this trend is here to stay, at least for the foreseeable future.

The change in men's self-presentation practices has seen the emergence of the term "metrosexual" (Simpson, 1994, 2002) as a label for these men. In light of such trends, we examine one of the more extreme examples of metrosexual activity—cosmetics use (Harrison, 2008). In particular, we examine the way men who use cosmetics discuss their use of such products in response to an online makeup tutorial on *YouTube*. Drawing on a selection of the 334 written posts to a makeup tutorial, we focus on the design and management of these responses, with reference to the gendered norms and identities invoked.

Our aims then in this paper are twofold. Firstly, by examining a selection of men's own accounts of their use of cosmetics we aim to contribute to the emergent body of literature on "metrosexuality." The majority of studies on this phenomenon have been largely theoretical. For example, Miller (2006, 2009) studied trends in men's consumption practices in the U.S. suggesting that these had has been brought about by a political-economic shift in the labour market, one in which employers have commodified the male body. Coad (2008), on the other hand, argued that the marketing of high profile sports celebrities, such as international footballer David Beckham and Olympic swimmer Ian Thorpe, are responsible for encouraging heterosexual men to "engage in practices stereotypically associated with femininity and homosexuality, such as care for appearance and the latest fashion trends" (p. 73). However, he goes one step further by arguing that "metrosexuality" challenges traditional notions of gender and sexuality. Because beautification and self-care have been conventionally associated with gay men and women, heterosexual "metrosexuality" represents a move beyond the constrictive bipolar categorizations masculine/feminine and hetero/homo. The impact of "metrosexuality" on gender and sexualities was a theme taken up by Carniel's (2009) study of "metrosexuality" and Australian soccer. She found that although men were now more image-conscious, spurred on by the consumption practices of sporting celebrities, masculinities on display were in effect hybridizations of existing masculinities. In other words: "While metrosexuality re-socializes men as consumers, it does not necessarily alter other fundamental characteristics of hegemonic masculinity" (p. 81) because existing discourses of masculinity which favour heterosexuality, strength, violence, risk taking and so on are still readily available and frequently drawn upon. Nothwithstanding the insights into metrosexual phenomena offered by these studies, we know little how self-identified "metrosexuals" construct this identity for themselves. Furthermore, these studies they are largely analyst-centered sociological interpretations of the phenomenon, presenting "metrosexuality" as a predefined given. We, on the other hand, take a different stance i.e., that identity categories, such as "metrosexual," are an "emergent feature" of social interactions (Kessler & McKenna, 1978; Stokoe, 2003, 2010; West & Fenstermaker, 1993)

Research Findings have indicated that physical attractiveness is associated with positive life outcomes (see Averett and Korenman 1996; Haworth-Hoeppner 2000). Blum (2003) proposed, "there's an expectation in our culture that the better you look, the more access to love and happiness you'll have" (p. 27). The value placed on physical attractiveness has become particularly evident in a consumer culture that promotes ideals of bodily perfection (Davis 2002; Featherstone 1991; Frank 2002). Not surprisingly, it has been argued that obsession with physical appearance is growing in intensity (Davis 2002; Gill, Henwood, and McLean 2005). Historically, having appearance concerns defied normative notions of masculinities (Carrigan, Connell, and Lee 1985; Connell 1995)---such concerns were stereotypically associated with women (Davis 2002). More recently, researchers have found that men too experience appearance concerns (Gill et al. 2005; Gullette 1994; Pope, Phillips, and Olivardia 2000). Yet, sociologists have yet to examine the role of hair in regards to these concerns.

Beauty-hair, clothes, skin, appearance-is a source of both concern and pride for women (Wolf 1991). Bolduc and Shapiro (2001) noted that hair, in particular, is an important and distinct aspect of appearance that plays a major role in self-perception. It is something that can be easily changed in terms of length, color, and shape to create different styles; styles which can be used to help people blend in, stand out, or even make a statement (Cash 2001). Different hair styles are associated with different moods or life events. Moreover, people do their hair daily in preparation to face their social world (Cash 2001). Thus, hair may not have a vital function but researchers have found that, particularly for women, hair is part of beauty and as such an important source of both esteem and identification (Cash 2001; Weitz 2001; Wolf 1991). Ricciardelli(2011) found in her study that hair plays a role in shaping perceptions of masculinity, appearance, and identification, which are largely intertwined. Findings are discussed in relation to consumerism and masculinities.

Historically, female images, in comparison with images of males, were more commonly sexually objectified (Bordo 1999). With the increased visibility of the male body in the media (Bordo 1999; Connell 1987; Davis 2002; Kimmel 1995), research has shown the male body has become more susceptible to media influence and increasingly objectified (Labre 2002; Tiggemann 2005). Pope et al. (2000) noted that super-male images in the media have become common-place, associating appearance with social, sexual, and financial success, such that they are now relatively unnoticed as "extraordinary." This both exposes men to idealized male images (Davis 2002; Gullette 1994 Pope et al. 2000; West 2000) and makes them more vulnerable to pressures to improve their appearance (Budgeon 2003). The argument suggested that men may gain power and prestige by having the "physically perfect" body (West 2000) and failing to meet these ideals has the potential to lead men to feel dissatisfied with their appearance and perhaps, as a result, themselves (Henwood, Gill, and McLean 1999). The rise of individualism and consumerism in affluent Western society ensures the body is no longer viewed as a biological entity. Rather it becomes a sociocultural construct-a medium of self-expression open to investment and consumption (Featherstone 1991; Shilling 1993) that is also shaped by structural dynamics that contour the conditions under which such beauty work takes place. Within consumer culture, advertisements promote an emaciated standard of beauty and often fragment the body into distinct parts, depending on the product being sold, where each part can be worked on and improved (Frank 2002). This process may result in people feeling detached from their body or objectifying their body parts as commodities. As such, how the body is presented-in terms of style, dress, shape, and size-not only reflects consumer culture, it also constitutes sense of self. Not surprisingly, more men are choosing to use cosmetics, body modification practices, and indulge in fashion to increase their physical attractiveness (Atkinson 2008). Therefore, this study attempts to segment the young men cosmetic users with respect to usage, attitude and benefit perception and to identify the profiling variables among them.

CONSTRUCTS AND MEASUREMENT

USAGE

Usage could be classified into two related factors, usage frequency and usage dependence. While usage frequency is an external, behavioural aspect, usage dependence is an internal feeling of the consumer. While usage frequency is measured as the actual usage in terms of daily versus number of times a week versus occasional wearing of cosmetics usage dependence is measured as the feeling that one cannot do without cosmetics.

ATTITUDE

Attitudes towards cosmetics vary for different persons depending on the social situations. Many wear cosmetics to impress others while some wear it for intrinsically perceived benefits. Persons who wear cosmetics in social situations to impress others is considered to be other directed while those who are not are considered to be self directed. This attitude has been measured by four items which represent need to impress friends and classmates as well as social situations like partying and interviews. All the four items have been reverse coded.

BENEFIT PERCEPTION

The construct of benefit perception comprises of appearance benefits, building self confidence and positive behavioural outcomes. While appearance is an external benefit as perceived by others, confidence is internal to the person and behavioural impact is due to some positive feelings. Three items comprising the three dimensions have been included to measure the construct. Items representing the three constructs outlined above have been used as segmenting variables in the study.

PROFILING VARIABLES

Profiling variables are those which are other than the segmenting variables which are expected to vary from cluster to cluster. These are variables of interest to the marketer which have some influence on the marketing actions that that the marketer can take. These are generally variable which will help in targeting the particular segment. For example the media habits of the segments could differ the knowledge of which could help the marketer to reach the segment. In this research profiling variables which have been used are place of residence classified into urban and rural, reasons for using cosmetics such as health, beauty and civility, frequency of purchase, factors influencing buying decisions such as quality, brand and offers, channels used such as departmental stores, drug stores etc., brand preference for important cosmetics used by men such as shaving cream, body spray etc.. Besides these variables skin type as well as amount spent had been included for testing differences across segments.

METHODOLOGY
Data have been gathered from 80 college going male students. All the students belonged to undergraduate classes of 3 different colleges of Goa state. Respondents have been selected from the muster roll using systematic random sampling. Selected students have been interviewed by trained investigators at the college premises.

Data have been collected using a pretested questionnaire. The information sought in the questionnaire included segmenting variables which are classified into usage, attitude and benefits. These variables were derived by conducting depth interviews of 15 respondents. The depth interviews revealed that there are daily users who could not do without cosmetics while there are also others who are occasional users. Some respondents revealed during the interviews that they have clearly perceived benefits like confidence and good looks due to the usage of cosmetics. Many respondents wanted to project a positive image to others with whom they interact like friends and class mates. One of the major reasons for usage was for attending parties and social occasions. Hence the study used usage, benefits and attitudes as revealed in the depth interviews as segmenting variables.

In order to arrive at the number of clusters in the final analysis hierarchical cluster analysis was performed using squared Euclidian distance with average linkage method. Perusal of the dendrogram along with the agglomeration schedule revealed three outlying cases. After removing these outlying cases again hierarchical clustering was done using the same method and examination of agglomeration schedule and dendrogram revealed existence of three clusters. In order to corroborate and proceed with further analysis K-Means cluster analysis was performed at the second stage.

Cluster analysis using K-Means clustering procedure was performed with the segmenting variables as identified in the qualitative phase. After the segmentation was done cluster memberships of cases were saved for further analysis such as for profiling the clusters and for finding association of clusters with other variables of interest to the marketer.

The profiling variables identified were place of residence classified into rural and urban, reason for usage of cosmetics such as health, beauty etc., frequency of buying, factors considered in buying, type of outlet used, type of skin of the respondent and brand preferences for important cosmetics used by male students. Chi-square test was performed to test for association between profiling variables and clusters.

RESULTS
The results of cluster analysis in the form of final cluster centres are given in table 1. The first cluster was found to be medium on all the variables of usage, attitude, and benefits. The second cluster consisted of heavy users of cosmetics with heavy daily usage, dependence, high concern for friends, classmates and social functions and also high on perceived benefits. The third cluster is low on usage, medium on attitude and low on benefit perception.

TABLE 1: FINAL CLUSTER CENTERS

	Cluster		
	1	2	3
Use Cosmetics Every Day	3.25	4.73	1.26
Cannot do without Cosmetics	2.50	4.27	1.70
Happy with friends without cosmetics	3.56	1.41	2.74
Happy with classmates without cosmetics	3.53	1.91	3.30
Happy in parties without cosmetics	3.91	2.41	3.22
Happy at interview without cosmetics	3.62	2.27	3.13
Cosmetics Improve appearance	3.03	3.59	1.30
Cosmetics improve confidence	2.75	4.00	1.52
Cosmetics Improve behaviour	3.47	4.05	1.35

TABLE 2: PLACE OF RESIDENCE

	Cluster 1		Cluster 2		Cluster 3	
Characteristic	Frequency	Percent	Frequency	Percent	Frequency	Percent
Rural	21	65.6	9	40.9	18	78.3
Urban	11	34.4	13	59.1	5	21.7
Total	32		22		23	

Chi-square is 6.934 with 2 degrees of freedom and significance of 0.031

TABLE 3: REASON FOR USING COSMETICS

	Cluster 1		Cluster 2		Cluster 3	
Characteristic	Frequency	Percent	Frequency	Percent	Frequency	Percent
Civility	4	12.5	5	22.7	2	8.7
Health	9	28.1	6	27.3	9	39.1
Beauty	16	50	5	22.7	11	47.8
Others	3	9.4	6	27.3	1	4.3
Total	32		22		23	

Chi-square is 10.086 with 6 degrees of freedom and significance of 0.121

TABLE 4: FREQUENCY OF BUYING

	Cluster 1		Cluster 2		Cluster 3	
Characteristic	Frequency	Percent	Frequency	Percent	Frequency	Percent
Once a month	23	71.9	20	90.9	15	65.2
Twice and month	6	18.8			3	13
Thrice a month	1	3.1			2	8.7
Four times a month	2	6.2	2	9.1	3	13
	32		22		23	

Chi-square is 7.990 with 6 degrees of freedom and significance of 0.239

TABLE 5: CONSIDERATION IN BUYING

	Cluster 1		Cluster 2		Cluster 3	
Characteristic	Frequency	Percent	Frequency	Percent	Frequency	Percent
Special offer	2	6.2			3	13
Quality	24	75	19	86.4	12	52.2
Friends' recommend	2	6.2			1	4.3
Price	1	3.1			2	8.7
Packaging					1	4.3
Brand	3	9.4	3	13.6	4	17.4
	32		22		23	

Chi-square is 11.499 with 10 degrees of freedom and significance of 0.320

TABLE 6: CHANNELS OF BUYING

	Cluster 1		Cluster 2		Cluster 3	
Characteristic	Frequency	Percent	Frequency	Percent	Frequency	Percent
Direct Sales Outlets	2	6.2	2	9.1	2	8.7
Online shopping	4	12.5	2	9.1	3	13
Supermarkets	14	43.8	9	40.9	9	39.1
Speciality stores	10	31.2	2	9.1	2	8.7
Drug stores	1	3.1	6	27.3	6	26.1
Department Store	1	3.1	1	4.5	1	4.3
	32		22		23	

Chi-square is 11.799 with 10 degrees of freedom and significance of 0.299

TABLE 7: TYPE OF SKIN

	Cluster 1		Cluster 2		Cluster 3	
Characteristic	Frequency	Percent	Frequency	Percent	Frequency	Percent
Normal	7	21.9	7	31.8	3	13
Sensitive	10	31.2	1	4.5	4	17.4
Combination	6	18.8	10	45.5	8	34.8
Dry	2	6.2			1	4.3
Oily	7	21.9	4	18.2	7	30.4
	32		22		23	

Chi-square is 11.862 with 8 degrees of freedom and significance of 0.157

TABLE 8: BRAND OF FACE CREAM

	Cluster 1		Cluster 2		Cluster 3	
Brand	Frequency	Percent	Frequency	Percent	Frequency	Percent
L'Oreal	1	3.1			3	13
Nivea	5	15.6	5	22.7	3	13
Vaseline	4	12.5	2	9.1	3	13
Fair and Handsome	13	40.6	8	36.4	10	43.5
Garnier	6	18.8	5	22.7	4	17.4
Others	3	9.4	2	9.1		
	32		22		23	

Chi-square is 7.445 with 10 degrees of freedom and significance of 0.683

TABLE 9: BRAND OF BODY SPRAY

	Cluster 1		Cluster 2		Cluster 3	
Brand	Frequency	Percent	Frequency	Percent	Frequency	Percent
Garnier					2	8.7
Reebok	2	6.2	1	4.5	3	13
Yardley	3	9.4	2	9.1	3	13
Axe	14	43.8	13	59.1	7	30.4
Nike	1	3.1				
Playboy	4	12.5	2	9.1		
Fogg	8	25			7	30.4
Others			4	18.2	1	4.3
	Cluster 1		Cluster 2		Cluster 3	

Chi-square is 25.400 with 14 degrees of freedom and significance of 0.030

TABLE 10: BRAND OF SHAVING CREAM

	Cluster 1		Cluster 2		Cluster 3	
Brand	Frequency	Percent	Frequency	Percent	Frequency	Percent
VI-Jhon	2	6.2	1	4.5	6	26.1
Gillette	24	75	16	72.7	12	52.2
Fusion	1	3.1	1	4.5	3	13
Nivea	3	9.4	2	9.1	2	8.7
Others	2	6.2	2	9.1		
	32		22		23	

Chi-square is 13.094 with 8 degrees of freedom and significance of 0.218

TABLE 11: BRAND OF FACE WASH

	Cluster 1		Cluster 2		Cluster 3	
Brand	Frequency	Percent	Frequency	Percent	Frequency	Percent
Fiama Di Wills	4	12.5	1	4.5	3	13
Dove	4	12.5	2	9.1	7	30.4
Nivea	7	21.9	4	18.2	1	4.3
Gillette	11	34.4	10	45.5	10	43.5
Others	6	18.8	5	22.7	2	8.7
	32		22		23	

Chi-square is 9.351 with 8 degrees of freedom and significance of 0.314

Place of residence was found to be associated with cluster membership with a significant chi-square. Further, cluster 1 and cluster 3 had more of rural residents while cluster 2 had more of urban respondents. Another variable that was found to be significantly associated with cluster membership is brand of body spray used. The amount spent per month on cosmetics was found to vary from cluster to cluster. The average monthly expenditure on cosmetics for cluster 1, cluster 2 and cluster 3 were Rs. 950, Rs. 684 and Rs.2221 respectively. All other variables had no relation with cluster membership as indicated by insignificant chi-square values.

DISCUSSION

Heavy users of cosmetics are more urban in characteristics. Fashion and trends are more prevalent in urban areas and also socializing opportunities are more in urban areas. Both usage frequency and usage dependence are high among heavy users. Heavy users were perceiving multiple benefits from wearing cosmetics such as physical, attitudinal and behavioural benefits. They were other directed and wanted to have social benefits from usage of cosmetics. The medium usage cluster had medium usage frequency and low usage dependence. They were more self directed than other directed in their usage and perceived medium benefits. Occasional users did not have high usage frequency nor did they have high usage dependence. They were more self directed and did not perceive usage benefits. The medium and light users were found to be predominantly rural in characteristics. The major reasons for usage by the medium and occasional users were beauty followed by health.

All the three clusters were found to be bulk buyers with most of them buying once a month and the major consideration in choice of a brand was quality for all the clusters. However the occasional nonbelievers were found to give higher consideration for brand than other clusters. The major channel for buying was found to be super markets followed by drug stores. Medium self directed had speciality stores as the second preferred channel compared to drug store in the other clusters.

The predominant face cream used was fair and handsome and there was no difference across the clusters in face cream brands. The clusters were found to differ in body spray brand usage. Although Axe was the most preferred brand for all the three clusters, usage of Fogg was more prevalent among medium and occasional users. Gillette was the most preferred shaving cream as well as face wash for all the clusters and there were no significant differences across clusters. Heavy and occasional users had more of combination skin while medium users had more of sensitive skin. Although the difference was not statistically significant it approaches significance and higher sample size can lead to significance.

Occasional non believers were spending maximum on cosmetics with a monthly average spending of Rs 2,221. This must be mainly due to their brand consciousness. It may be partly also due to the reason that occasional users resort more to external sources like beauty parlours for application of cosmetics. Heavy and medium users had an average spending of Rs 684 and Rs 950 respectively. The reason for lower spending of these clusters could be attributed to lower brand consciousness and self application.

CONCLUSION

There are distinct segments in the young male cosmetic market with respect to usage, attitude and perceived benefits of cosmetic usage. The spending habits of these clusters were significantly different. However, their behaviour with respect to purchase and consumption such as channels, frequency, and brand preferences were not found to vary across clusters. In general it may be attributed to similar beliefs with respect to these factors. Perceptions of many of these variables are created by the marketer by positioning and communication. In general it may be concluded that in cosmetics to young men there are powerful brands which cut across all the segments and segments have similar behavioural preferences. It may also be concluded that brands have failed to have a differentiated positioning strategy in tapping the differences across segments. This also points to the fact that there exists opportunity for different brands to have differentiated strategies.

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ASSESSMENT OF PAYMENT SYSTEMS ON THE PROPOSITION THAT COSTS AND RISKS OUTWEIGH BENEFITS TO USERS, BANKS AND SOCIETY

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ABSTRACT

To support the successful implementation of cashless policy of Central Bank of Nigeria (CBN), through massive acceptance of e-payment, the study examined the proposition that the costs and risks of e-payment outweigh its benefits to users, banks and society. The assumption of the study was that if the benefits of e-payment outweigh its costs and risks to users, banks and society over other payment systems, then it will be easy to convince individuals and corporates to accept and prefer it. A questionnaire seeking to establish the extent to which the different payment systems perform on the basis of costs and risks outweighing benefits to users, banks and society, was administered on 282 highly educated and financially active users of the three payment systems based on their experiences in Nigeria. Using the data analyzed, the research questions were answered and the following findings made: compared to cash and cheque payment systems, e-payment was rated better to users, banks and society on the proposition that costs and risks outweigh benefits. The study concluded therefore that individuals, banks and society will accept and prefer e-payment platforms in their financial transactions. To sustain this conclusion the study made the following recommendations: Communicate the benefits of e-payment to customers, banks and the society; reduce the costs and risks of e- payment; and persuade on the superiority and acceptance of e-payment in spite of its costs and risks.

KEYWORDS

Cashless Policy, Electronic-Based Transactions, Payment Systems, Perceived Ease of Use (PEOU) and Perceived Usefulness (PU).

1.0 INTRODUCTION

The role of payment systems in driving economic growth and development has been well documented (Financial Derivatives Company Limited (FDCL), (2012) and Okeke, 2014). An efficient and modern payment system is positively correlated with economic development, and is a key enabler for economic growth (CBN, 2014).

Deriving from the established role of good payment systems in growing the economy, the Central Bank of Nigeria (CBN) was not satisfied that the Nigerian payment system was for long dominated by cash-based transactions. To reverse the trend and ensure that best practice is adopted in Nigeria, the CBN introduced cashless policy in 2012.The cashless policy of CBN "aims at reducing, not eliminating, the amount of physical cash (coins and notes) circulating in the economy, and encouraging more electronic-based transactions (payments for goods, services, transfers, etc.)".

The cashless policy was introduced to:

-drive development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 2020.

-reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach.

-improve the effectiveness of monetary policy in managing inflation and driving economic growth.

The policy was also introduced "to curb some of the negative consequences associated with the high usage of physical cash in the economy". The negative consequences included:

High cost of cash**:** There is a high cost of cash along the value chain - from the CBN & the banks, to corporations and traders; everyone bears the high costs associated with volume cash handling.

High risk of using cash: Cash encourages robberies and other cash-related crimes. It also can lead to financial loss in the case of fire and flooding incidents.

High subsidy: CBN analysis showed that only 10 percent of daily banking transactions are above 150k, but the 10 percent account for majority of the high value transactions. This suggests that the entire banking population subsidizes the costs that the tiny minority 10 percent incurs in terms of high cash usage.

Informal Economy: High cash usage results in a lot of money outside the formal economy, thus limiting the effectiveness of monetary policy in managing inflation and encouraging economic growth.

Inefficiency & Corruption: High cash usage enables corruption, leakages and money laundering, amongst other cash-related fraudulent activities.

The expected benefits of the new policy as listed by CBN included the following:

- For Consumers: Increased convenience; more service options; reduced risk of cash-related crimes; cheaper access to (out-of-branch) banking services and access to credit.
- For Corporations: Faster access to capital; reduced revenue leakage; and reduced cash handling costs.
- For Government: Increased tax collections; greater financial inclusion; increased economic development. Increased tax collections; greater financial inclusion; increased economic development.

To drive cashless policy and ensure that it is adopted and preferred by a critical mass of users (individuals and banks) CBN has adopted a mixed strategy of incentives and sanctions in implementing it. To motivate individuals and corporates to switch from cash-based to electronic payment systems, a sustained national campaign aimed at educating, informing and persuading individuals , organizations and governments to make the switch has been launched. The campaign has focused on explaining what e-payment is, how it operates, what it does, how it is useful and better than other payment systems and the benefits derivable from its use. To make its adoption easier, the implementation strategy and plan has spanned three stages of introduction. It was started on pilot basis in Lagos on April 1, 2012.Thereafter; it was extended to six states of the federation- Federal Capital Territory (Abuja), Abia, Anambra, Kano, Ogun, and Rivers in July 1, 2013. The national rollout is planned for July 1, 2014. On the other hand, the implementation strategy has built in sanctions aimed at compelling individuals to adopt the policy. This involves the imposition of cash withdrawal and payment limits beyond which fines are paid. For individuals, the limit is 150,000 Naira while for corporates it is 3,000,000 Naira.

The rebasing of Nigeria's GDP has added a more imperative impetus for cashless policy to succeed. The bigger GDP figure needs a more efficient payment system if it is to be sustained and grown. Indeed, the bigger the size of an economy, the more the need for an efficient payment system to support and enhance it.

While CBN has articulated the benefits of cashless policy to three key stakeholders (consumers, corporations and governments) in the economy, this study is of the view that the policy will be adopted and sustained more if its benefits can be demonstrated to three critical stakeholders- customers/users/individuals, banks who anchor it and the larger society whose interest is the overriding socio-economic justification for the formulation and implementation of government policies. The framework of the study goes further to note that like all new systems, the cashless policy will not only offer benefits to customers, banks and the society. There must be costs and risks associated with cashless policy those customers, banks and society will do well to analyze and manage if they are not to lose out even as the policy on cashless transactions is being implemented.

The rationale for the study derives from the appreciation of the need to balance the benefits of e-payment against the associated costs and risks. Placing the benefits against the costs and risks will make for a more meaningful appreciation of the issues involved in selling cashless policy to the nation. It will also help in explaining the ease or difficulty in getting individuals and corporates to make the expected switch from cash-based financial transactions to e-based financial transactions. The central questions listed for the study to answer were:

Compared to cash and cheque payment systems, do the costs and risks of e-payment system outweigh the benefits to users/customers?

Compared to cash and cheque payment systems, do the costs and risks of e-payment system outweigh the benefits to banks?

Compared to cash and cheque payment systems, do the costs and risks of e-payment system outweigh the benefits to society?

The major assumption of the study was that cashless policy will be easily adopted and sustained as the preferred payment system if the benefits outweigh the costs and risks to consumers, banks and the society. Conversely, e-payment will be difficult to adopt and be preferred, if the costs and risks outweigh the derivable benefits to consumers, banks and society.

2.0 LITERATURE REVIEW

Many studies have been conducted on defining and determining the benefits of e-payment especially in Nigeria. Among these studies are Idowu (2005), FDCL (2012) and Okeke (2013). Idowu (2005) listed the following as the specific benefits of e-payment: quality service enjoyed, great reduction in time being spent in banking halls, confidentiality, bank statement, balance etc. obtained with ease, 24/7 service delivery and account could be accessed almost anywhere in the world. For FCDL (2012), the major benefits of using cashless platforms are in a descending order-free from carrying large sum of money, make transactions faster, convenient to use, reduce frauds/theft, have access to money out of bank branch and make impulse purchase possible. For Okeke (2013), the benefits of e-payment are-reduced transaction costs (ATM and internet channels are cheaper than tellers), information is readily available to all market participants on multiple providers because there are sites that aggregate information on product offerings) and perfect competition (internet brings about transparent pricing and aggregation of buyers and sellers.

While the specific benefits determined by the different studies are valid, they cannot constitute a good basis for comparing all payment systems. For the purpose of this study, what was required was a framework within which all payment systems, cash, cheque and e-payment, can be appraised in terms of what users are or should be benefiting from using them. This common framework was found in Technology Acceptance Model (TAM). TAM hypothesizes that a person's acceptance of a technology is determined by his/her voluntary intentions to use that technology. The intention, in turn, is determined by the person's attitude toward the use of that technology and his/ her perception concerning its usefulness. Attitudes are formed from the beliefs a person holds about the use of the technology. The first dimensions of the attitude are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

A key purpose of TAM is to provide a basis for tracing the impact of external variables on internal beliefs, attitudes, and intentions. It suggests that PEOU, and PU are the two most important factors in explaining system use. Davis (1989) defines PU as the degree to which a person believes that using a particular system would enhance his job performance and PEOU as the degree to which a person believes that using a particular system would be free from effort.

For the benefits of e-payment system, the study relied on the ten factors used in TAM in explaining the PU of technology based services (Davis (1989) and Davis, Bagozzi, and Warshaw, (1989)). These factors included the following:

1. E-payment enables me to accomplish financial transactions more quickly
2. Using e-payment gives me greater control over my financial transactions
3. Using e-payment reduces my need to carry cash
4. Using e-payment increases the convenience of financial transactions
5. Using e-payment reduces incidences of fraud in financial transactions
6. E-payment application reduces the cost/bank charges of financial transactions
7. Using e-payment makes financial transactions more reliable
8. Using e-payment makes financial transactions more dependable
9. Using e-payment allows the minimization of mistakes/errors in financial transactions
10. Overall, I find e-payment helpful in my financial transactions.

For the costs and risks of e-payment system, nineteen (19) factors drawn from the PEOU under the TAM framework (Davis (1989) and Davis, Bagozzi, and Warshaw, (1989)), disadvantages and problems of e-payment sourced from Adewuyi (2011), Okeke (2013), E-Payment Providers Association of Nigeria (E-PPAN) (2013), and FDCL (2012) were adopted. The nineteen factors used were:

1) Electronic fraud
2) Security at cash points/robbery attack
3) Trust/confidence that the platform will always work and be available
4) Infrastructural inadequacies/network/service failure-technology breakdown
5) Dispute resolution mechanism/it takes many days to reverse failed ATM withdrawal from other banks machines
6) Long queues at ATM points
7) Withdrawal/spending limits
8) Inconvenience of being served by machines instead of human beings
9) Hidden charges
10) Mental effort and dexterity necessary in operating the platforms
11) Privacy/security of customers data and financial worth
12) Prone to error/mistakes
13) Availability/accessibility
14) Poor customer service experience
15) Rigidity/inflexibility of platforms
16) Reliability/dependability
17) High costs
18) Legal difficulty in accepting electronically generated evidence
19) Ill-defined responsibilities and liabilities of banks and customers

3.0 RESEARCH METHODOLOGY

The data need of this study was defined in two broad areas. First is the articulation of core benefits of e-payment from the perspective of enlightened users of the payment system to consumers, banks and society. Second is the determination of the costs and risks associated with the payment system again from the perspective of its users.

To ascertain the relative importance of the benefit factors, the study requested respondents to identify and rank the first five most important factors to them based on their experience of e-payment system on a scale of 1-5, with 1 representing the most important and 5 the least most important. The benefit factors were as listed in section 2 of this report. In calculating the cumulative points for the important benefit factors, the first most important factor was assigned a scale of 5, the second a scale of 4, the third a scale 0f 3, the fourth a scale of 2 and the last one a scale of 1.The aggregate point for the factors was used in ranking them from the first to the tenth.

For the costs and risks of e-payment system, nineteen (19) factors were drawn from the Perceived Ease of Use (PEOU) under the TAM framework (Davis (1989) and Davis, Bagozzi, and Warshaw, (1989)). The costs and risks factors were listed for the respondents to choose the five most important ones. The five chosen factors were ranked on a scale of 1-5 based on the experiences of the respondents. The cumulative points for each of the factors was computed based on multiples of 5 for the first most important, 4 for the second, 3 for the third,2 for the fourth and 1 for the fifth. The aggregate cumulative point was used in ranking the factors from first to nineteenth. The nineteen factors used were as listed in section 2 of this report.

The study relied on questionnaire as the survey instrument for collecting data on the benefits and costs and risks of e-payment system based on Nigerian experience of respondents. With a view to enhancing the validity and reliability of survey instrument, the initial draft of the questionnaire was pilot tested among MBA students of National Open University of Nigeria, Lagos. Based on the responses received, ambiguous statements were recast, redundant questions dropped and additional questions included to fill identified gaps. The questionnaire listed the factors and required respondents to identify and rank them based on their personal experience of e-payment system. It became imperative therefore to select respondents from a population of highly literate and financially active Nigerians who are aware of the three payment systems obtainable in Nigeria**.**

To meet the outlined requirements of the data collection source, the study used a population of students of Enugu State University of Technology (ESUT) Business School, located in Enugu, the capital of Enugu State in South East, Nigeria. Being an executive programme with students mostly working, drawn from all states, tribes and religions in Nigeria, the population surveyed met the requirement of financially well to do and active users of e- payment system in Nigeria. This is in line with the Grounded Theorists rule of selecting purposive samples from participants who represent the major categories of people relevant to the research(Charmaz(2003) and Henwood and Pidgeon (1993).Being a lecturer on the ESUT programme facilitated access to the students and cooperation from them in completing the questionnaire. With a population of 550 students, the questionnaire was administered on all the willing students in MBA, M.Sc and PGD classes on the 14th and 15th of December, 2013. A total of 319 copies of the questionnaire were administered and retrieved within the two days. Given incompleteness' and inconsistency in completion 37 returned questionnaire were rejected. Thus, 282 returned questionnaires were analyzed. This gave an effective response rate of 88.40%.

The collected primary data were presented on tables and analyzed using frequency distribution and aggregation of points to arrive at cumulative points and enable ranking. Data were also collected and analyzed to define the profile of respondents.

4.0 RESULTS AND DISCUSSION

4.1 PROFILE OF RESPONDENTS

The study drew the profile of respondents with respect to gender, age, marital status, gross annual income, employment status, sector of employment, operation of accounts with Nigerian banks and highest educational qualification factors as presented on Table 1 below.

TABLE 1: PROFILE OF SURVEY RESPONDENTS

Category	Statistics
Gender	
Male	177(62.77%)
Female	105(37.23%)
AGE	
20-30 years	42(14.89%)
30-40 years	165(58.51%)
40-50 years	45(15.96%)
50-60 years	27(9.57%)
60 years and above	03(1.06%)
Marital Status	
Single	73(25.89%)
Married	201(71.28%)
Divorced	4(1.42%)
Widowed	4(1.42%)
Gross Annual Income	
Less than N1m	54(19.15%)
N1M-N3M	111(39.36%)
N3M-N5M	63(22.34%)
N5M-N7M	27(9.58%)
N7M-N9M	6(2.13%)
N9M- N11M	3(1.06%)
N11M-N13M	2(0.71%)
N13M and above	1(0.36%)
Employment Status	
Employed	267(94.68%)
Unemployed	15(5.32%)
Sector Of Employment	
Private	119(42.20%)
Public	163(57.80%)
Operation Of Account With Nigerian Banks	
Yes	282(100%)
No	0(0%)
Highest Educational Qualification	
HND/BSc	177(62.77%)
PGD	33(11.70%)
M.Sc/MBA/MPA	69(24.47%)
PhD	03(1.06%).

Source: Field Survey, 2013.

The profile of respondents is captured on table 1 above as follows: The respondents are highly educated with 62.77% having a minimum educational qualification of first degree (BSc, BA and HND). Others hold higher educational qualifications.

The major age bracket of respondents was 30-40 years, accounting for 58.51%, and the least being 60 years and above with 1.06%.

62.77% of respondents are male.

While 71.28%) of the respondents are married, 25.89% are single and 1.42% are divorced.

The major income brackets of respondents were N1M-N3M (39.36%) and N3M-N5M (22.34%) per annum.

94.68% of respondents are employed with 57.80% working in the public sector and 42.420% in the private sector.

100% of the respondents have been involved with all payment system and maintain account with banks in Nigeria.

4.2 ANALYSIS ACCORDING TO RESEARCH QUESTIONS

On the three tables that follow, the responses of respondents based on the ranking of cash, cheque and e-payment systems on the proposition that the costs and risks outweigh benefits to users, banks and society are presented.

TABLE 2: RANKING OF CASH, CHEQUE AND E-PAYMENT SYSTEMS ON THE PROPOSITION THAT THE COSTS AND RISKS OUTWEIGH BENEFITS TO USERS

Factor	Cash	Cheque	E-Payment
The Costs and Risks Outweigh Benefits to Users/Customers	First -213(3)=639 Second -9(2)=18 Third -60(1)=60 Total =717**(First)**	First -12(3)=36 Second -237(2)=474 Third -33(1)=33 Total =543**(Second)**	First -60(3)=180 Second -33(2)=66 Third -189(1)=189 Total =435**(Third).**

Source: Field Survey, 2013.

Table 2 above reveals that respondents ranked the three payment systems on the basis of costs and risks outweighing benefits to users/customers as cash, first, cheque, second and e-payment third. Put differently, the benefits of cash, cheque and e-payment systems are outweighed by their costs and risks in a descending order of magnitude: 717 points, 543 points and 435 points respectively based on the experiences of respondents. The payment system with the lowest costs and risks/ benefits ratio is e-payment, with 435 points. Having established the payment systems performance on the basis of costs and risks/benefits to users/customers, the study went on to establish their performance on the basis of banks. The data is presented on Table 3 below.

TABLE 3: RANKING OF CASH, CHEQUE AND E-PAYMENT SYSTEMS ON THE PROPOSITION THAT THE COSTS AND RISKS OUTWEIGH BENEFITS TO BANKS

Factors	Cash	Cheque	E-Payment
The Costs and Risks Outweigh Benefits to Banks	First -195(3)=585 Second -12(2)=24 Third -75(1)=75 Total =684**(First)**	First -24(3)=72 Second -234(2)=468 Third -24(1)=24 Total =564**(Second)**	First -72(3)=216 Second -30(2)=60 Third -180(1)=180 Total =456**(Third).**

Source: Field Survey, 2013.

Table 3 above reveals that respondents ranked the three payment systems on the basis of costs and risks outweighing benefits to banks as cash, first (684 points); cheque, second (564 points); and e-payment third (546 points). For banks therefore the payment system with the lowest costs and risks/benefit ratio is e-payment. For the society, the data on costs and risks outweighing benefits is presented on Table 4 below.

TABLE 4: RANKING OF CASH, CHEQUE AND E-PAYMENT SYSTEMS ON THE PROPOSITION THAT THE COSTS AND RISKS OUTWEIGH BENEFITS TO SOCIETY

Factors	Cash	Cheque	E-Payment
The Costs and Risks Outweigh Benefits to Society	First -192(3)=576 Second -9(2)=18 Third -81(1)=81 Total =675**(First)**	First -9(3)=27 Second -234(2)=468 Third -39(1)=39 Total =534**(Second)**	First -81(30=243 Second -39(2)=78 Third -162(1)=162 Total =483**(Third).**

Source: Field Survey, 2013.

Table 4 above reveals that respondents ranked the three payment systems on the basis of costs and risks outweighing benefits to society as cash, first (675 points); cheque, second (534 points); and e-payment third (483 points). For the society therefore the payment system with the lowest costs and risks/benefit ratio is e-payment.

4.3 ANSWERS TO RESEARCH QUESTIONS

Question 1: Compared to cash and cheque payment systems, do the costs and risks of e-payment system outweigh the benefits to users/customers?

Answer: Reference to Table 2 will reveal that based on the experiences of respondents with the three payment systems, e-payment was ranked lowest on the factor of costs and risks outweighing benefits to users/customers. Based on this assessment the study answers that the costs and risks of e-payment system do not outweigh its benefits to users when compared to cash and cheque payment systems. While e-payment system scored a total of 435 points on this factor, cash and cheque payment systems scored 717 points and 543 points respectively.

Question 2: Compared to cash and cheque payment systems, do the costs and risks of e-payment system outweigh the benefits to banks?

Answer: question 2 is answered with reference to Table 3.it reveals that e-payment has the lowest points of 456 when compared to cash and cheque payment systems with 684 points and 564 points respectively on the factor of costs and risks of payment systems outweighing benefits to banks. Consequently, the answer to question 2 is that compared to cash and cheque payment systems, e-payment system does not have costs and risks outweighing benefits to banks.

Question 3: Compared to cash and cheque payment systems, do the costs and risks of e-payment system outweigh the benefits to society?

Answer: Reference to Table 4 will reveal that based on the experiences of respondents with the three payment systems, e-payment has the lowest points on the respondents ranking of payment systems and costs and risks outweighing benefits to society. While e-payment has 483 points to occupy third position, cash and cheque payment system have 675 points and 534 points to occupy the first and second positions respectively. To answer question three directly, e-payment compared to cash and cheque payment systems is better on the proposition that costs and risks outweigh benefits to society.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

Based on analyzed data and answers to research questions, e-payment is considered better than cash and cheque payment systems on the proposition that costs and risks outweigh benefits to customers, banks and society, given the experiences of Nigerian users of the three payment systems. If the benefits of e-payment system compared to costs and risks are better than the other payment systems to customers, banks and the larger society, it follows that individuals, banks and society will accept and prefer it in their financial transactions. The challenge of selling e-payment is to highlight its features and effectively communicate its benefits even as its costs and risks are explained.

5.2 RECOMMENDATIONS

To facilitate the acceptance of e-payment options in financial transactions in Nigeria and enhance the successful transition from a cash-based to e-payment based transactions as articulated by the cashless policy of CBN, the following recommendations are proffered:

1. COMMUNICATE THE BENEFITS OF E-PAYMENT TO CUSTOMERS, BANKS AND THE SOCIETY

In communicating to inform, educate, persuade and remind individuals and corporates on the acceptance of e-payment as the dominant payment system in Nigeria, the message should emphasize the key benefits of speed, greater control over financial transactions, reduced need to carry cash-making the society safer, increased convenience and reduced incidences of mistakes/errors in financial transactions. When people know what the stand to benefit in using e-payment system and what they will be losing by using other payment options, they will be minded to make the necessary switch given the logic of rationality in human behavior.

2. REDUCE THE COSTS AND RISKS OF E-PAYMENT

Communicating the benefits of e-payment should go with efforts to reduce the costs and risks of its usage in Nigeria. The specific costs and risks to emphasize will include the following:

Electronic fraud, security at cash collection points(ATMs), trust/confidence that the platform will always work seamlessly as at when and where needed, infrastructural inadequacies-causing service failure and unavailability, and dispute resolution mechanism ,that will resolved issues between operators and users speedily and equitably.

3. **PERSUADE ON THE SUPERIORITY AND ACCEPTANCE OF E-PAYMENT IN SPITE OF ITS COSTS AND RISKS**

Engage in persuasive marketing communication that will effectively demonstrate the clear benefits of e-payment system over and above cash and cheque payment systems and the lower costs and risks of it. Listing and explaining the features of e-payment system supporting the claimed benefits and the reduced costs and risks will be convincing and getting people to try, accept and prefer it to other payment modes.

6.0 LIMITATIONS OF THE STUDY AND FURTHER RESEARCH

The major limitation of the study was the segment of the population studied. The class of respondents represented the educated elite. With a minimum educational qualification of a first degree, this is an extreme segment of Nigerian population. Given that the literacy rate in Nigeria is 61.3 %(UNHDR, 2011), a segment as educated as this group cannot represent the reality of general Nigerian situation. Another extreme of the study sample is their level of employment which stood at 94.68%. This is a far cry from the employment circumstances of the Nigerian population. The unemployment rate in Nigeria stands at 23.90 %(NBS, 2014).

Given the centrality of education and employment status of people in determining their PU and PEOU of e-payment platforms and level of financial activity respectively, the lopsidedness of the study sample in these two critical areas pose a limitation in drawing conclusions on the benefits and costs and risks associated with e-payment system in Nigeria. It is useful however studying this segment of the population as a basis for the articulation of targeted interventions that may be necessary in securing quick wins and building a critical mass of early adopters of e-payment system that will serve as a platform for subsequent spreading of the need for the wider acceptance of the payment system by the general population. The choice of the sample studied was therefore deliberate and strategic. It nonetheless necessitates further studies to assess the factors other less educated and less financially active Nigerians consider as the benefits and costs and risks associated with e-payment system in Nigeria. Other social issues like religion and tribe can also be explored in establishing the factors that define the core benefits and costs and risks associated with e-payment system in Nigeria.

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DETERMINANTS OF DOMESTIC PRIVATE INVESTMENT FIRM GROWTH IN ETHIOPIA: A CASE STUDY IN MEKELLE CITY, TIGRAY

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ABSTRACT

The main objective of this study was to identify and analyze the determinants of domestic private investment growth in Mekelle City, Tigray. For this purpose Ordinary Least Square (OLS) regression model was employed for estimating the determinants of growth of domestic private investment. The study used primary data by taking systematic random sampling from domestic private investment firms in operation. The study revealed that tax rate, investment incentives, access to finance, and firm age have been negatively influenceing; interest rate, infrasturacture access, economic condition, and market access were positive and signfcant determinants on growth interms of employees size. On the other hand, firm size and market acces were negative; and economic condition was positive and significant determinant factors on growth of domestic private investment in terms capital size. Mekelle investment office should facilitate growth of domestic private investment via identifying and announcing the potential investment areas in the City, enhancing motivational supports such as incentives, avoiding corruption, necessary infrastructural access to the identified potential investment areas, making regular communication with the existing investment firms, and build strong linkage and collaboration with infrastructure processors. This study mainly focused on domestic private investment firms' growth in Mekelle City (which were in operation) and does not represent the investments in other different phases but valuable findings may come up by taking data from different Zonal Cities in the region. Also, sector specific investigation is recommended.

KEYWORDS

Determinats, Domestic, Growth, Investment, Operation.

1. INTRODUCTION

The act of investment involves the acquisition of goods, which are destined not to be consumed or entirely used up in the current period. It is, therefore, a means by which individuals or groups can attempt to influence their own well being by the sacrifice of current consumption. Investment by individuals may take the form of direct purchase of capital assets, which are either intangible such as education, or tangible such as house, training for their employees, knowledge by research and development, and investment in fixed capital stock (asset). This last form of investment is the most crucial for both individual firm and the short and long term economic future of the country in which the firm operates (Antonakis, 2008).

Investment can be classified as public and private investments. Private investment can also be classified as domestic private investment and foreign direct investment types of private investments (Ndikumana & Verick, 2007).

Public investment is an investment mostly spent by the public (government) like investments in capital projects such as infrastructures (roads, telecom service projects, schools, universities, health centers and hospitals, power etc.) and their purpose is not for profit. FDI (foreign direct investments) are private investments which are partly or wholly owned by non residential potential investors and their objective is mostly for profit and risk diversification. Domestic private investment refers to the private investments wholly owned by residential potential investors and operating in the country domestically.

Different studies have shown that private investment's effect on growth is greater than government (Public) investment (Ghura & Hadjimichael, 1996, as cited in Beddies, 1999). Besides, According to Bouton and Sumlinski (1998) though, theoretical development models developed in the economics literature makes no difference between private and public investment, there is an emerging pleasure that private investment is more efficient and creative than public investment. Evidence from empirical studies suggested that private investment has a stronger relationship with long run economic growth than public investment.

According to Access Capital (2011/12) investments assessment report, the ratio of private investment to GDP in Ethiopia between 2001and 2012 has been averaging between 5.8% and 10%. This percentage (ratio) is below the levels being experienced in successful economies, which is required to spur economic growth needed for employment creation and poverty reduction. The ratio of private investment to GDP is 16% in Latin America, 18% in advanced countries and 16.5% in newly industrialized countries in Asia (Hernandezcata, 2000), as cited in Seruvatu and Jayarman (2001).

Private investment contributes to economic growth and development, plays a vital role in growth generating process and leads to growth of incomes, adoption of new technology, and creation of employment opportunities and improvement of living conditions of citizens. Long-term solutions to technology deficiency, unemployment and poverty in developing countries can be created through private investment. Investment plays a very important and positive role for the progress and prosperity of any country (Haroon & Nasr, 2011).

According to Haroon and Nasr (2011), some of the advantages of private investment are increases the level of employment opportunities, increases individual income, improves standard of living, helps to reduce the poverty in the country, helps to increase the per capital income of country, pushes up the growth rate of GDP and GNP, and helps to attract foreign investors to invest in the country, especially Diasporas living and working abroad.

Many countries rely on investment to solve their economic problems such as poverty and unemployment. Developing countries like Ethiopia are trying to learn from each other how to attract and encourage private investors because proper investment in proper economic sectors can change their economic conditions quickly. These days, Ethiopia as a developing country is intensively working at improving socioeconomic development of its citizens. Since private sector is the engine of industrial growth, the government of Ethiopia has been promoting and supporting the private sector in order to enhance their contribution for the economic growth and industrialization endeavor. Particularly, the private sector has been encouraged to invest in activities that link manufacturing and agricultural sectors (GTP annual progress report, 2010/11).

Due to this reason, Government of the Federal Democratic Republic of Ethiopia has recognized and paid due attention to the promotion and development of private investment including working a lot to attract private investors for investment in different sectors of the economy and is taking many major steps such as expanding infrastructural access, providing investment incentives, and facilitating financial access to encourage private investment in order to increase the pace of economic development in the country. Therefore, the purpose of this study was to assess the determinants of domestic private investment growth in Mekelle City.

2. RELATED LITERATURE REVIEW

In Ethiopian context investment is expenditure of capital in cash or in kind or in both by an investor to establish a new enterprise or to expand or upgrade one that already exists (FDRE investment proclamation, 2012).

According to the study of Haroon and Nasr (2011), Private investment contributes to economic growth and development, plays a vital role in growth generating process and leads to growth of incomes, adoption of new technology, and creation of employment opportunities and improvement of living conditions of citizens. Long term solutions to technology deficiency, unemployment and poverty in developing countries can create through investment. Investment plays a very important and positive role for the progress and prosperity of any country.

Investment can be classified as public and private investments. Private investment can also be classified as domestic private investment and foreign direct investment types of private investments (Ndikumana & Verick, 2007).

According to Haroon and Nasr (2011) some of the advantages of private investment are: it increases the level of employment in the country and it increases the individual income as a result their standard of living would improve; it helps to reduce the poverty in the country, it helps to increase the per capita income in the country and it pushes up the growth rate of GDP and GNP. It also helps to attract foreign investors to invest in the country especially Diasporas living and working abroad.

Generally speaking, it is widely accepted that economic growth is one of the prime indicators of the development of nations. Countries which have diversified and strong economic base are more likely to succeed on meeting the social and economic needs of their societies. The development history of the developed world shows that the mystery of their economic strength mostly comes from their strong investment base. Most of the development gap between the developing and developed nations widely lies on the success and failure of this investment sector.

Therefore, promoting investment in Ethiopia is more than necessary to sustainably succeed in the development of this least developed nation. This can be achieved partly through formulating comprehensive investment policy, improving the investment climate, and making sound policy interventions. The result from this research can contribute to the endeavors of the region in the sphere of sound policy selection and evaluation of the existing policy interventions to promote domestic private investment in the region in general and in Mekelle City in particular. Reviewing the existing empirical evidence is critical to rationally conduct the study and to support or argue based on the empirical findings.

Empirical results by Salahuddina, Rabiul, and Abdullah (2009) suggested that the lagged investment, growth rate of per capita real GDP, domestic savings, trade openness and institutional development have positive significant effect on investment. In addition, foreign aid and private sector credit are found to have significant positive impact on investment but not robust. According to the authors, foreign debt servicing has consistent negative effect on investment. Other variables such as, inflation rate, lending rate, human capital and population growth have been found to have no significant effect on investment.

According to Gupta (2008), the major determinant factors of domestic private investment are expected output, profitability of investment, cost of capital (nominal interest rate, depreciation rate, capital loss or gain), wage rate of employees, Tobin's Q (market value of installed capital divided by replacement cost of installed capital), tax law of the country, financing constraints (firm's balance sheet), technology up gradation, improved business confidence (stock market behavior), and government investment projects (other fiscal monetary policies).

As empirical investigation by Adedamola, Felix, Kayode, and Kehinde (2012) showed growth in private investment is best explained by changes in political situation as represented by a dummy variable representing investment climate. The authors mentioned that the overall measure of macroeconomic instability and political situation serves as hindrance to private investment. Private sector output, gross domestic product, and credit to the private sector have all been significant determinants of private investment growth.

Gregory (2010) argued that all types of investment spending are inversely related to the real interest rate. A higher interest rate raises the cost of capital for firms that invest in plant and equipment, raises the cost of borrowing for home buyers, and raises the cost of holding inventories. There are various causes of shifts in the investment condition. The most improvement causes are the available technology, an increase in the population, raises the demand for housing and raises residential investment, various economic policies; such as changes in the investment tax credit and the corporate income tax, incentives to investment, volatility of the business cycle, the output of the economy, higher employment size, output level, level profits, the financing constraints, income level of the society are the determinants of private investment.

Magnus and Marbuah (2010) concluded that private investment is strongly minded in the short run by public investment, inflation, real interest rate, openness, real exchange rate and a regime of constitutional rule, while real output, inflation, external debt, real interest rate, openness and real exchange rate significantly influenced private investment response in the long run.

Study results by Afonso and Tovar (2011) has showed a positive effect accredited to total government expenditures and to public investment in fostering private investment, and negative effects of government expenditure on wages and government consumption spending on private investment. Interest payments and subsidies have a negative effect on both private and public types of investment (particularly in the emerging economies sub-group). Social security spending has a negative effect on private investment for the full and OECD samples, whereas government health spending has a positive and significant impact on private investment.

Demand contraction, availability of capital funds, access to credit, output growth, real private credit, business opportunity and investment costs, the existence of spare capacity, role of government in promoting private investment mainly through creating conducive investment climate, tax, and interest are the factors that can hinder the growth private investment (Jongwanich & Kohpaiboon, 2006).

In the case of investment behavior of individual firms, it is reasonable to assert that both current and expected levels of demand and relative factor prices are likely to affect and determine the current level of investment. It is reasonable to assert that taxation imposed on business income must be taken into account and therefore the present value of the income stream of the firm. In addition it is reasonable to argue that firms are profit maximizes (in the static or dynamic sense) (Antonakis, 2008).

Empirical findings of Guimaraes and Unteroberdoerster (2006) in Malaysia showed that in the long run, the level of private investment has been closely related to real GDP, even though there is also evidence of sustained overinvestment, in particular in the property sector; private investment is unlikely and unnecessary from a growth perspective to return to its original level once crises is happening; besides macroeconomic conditions, a shift in investors' perceptions, which may have been triggered by prolonged overinvestment, appears to have contributed to the pointed decline in private investment in recent years; at the firm level, profitability is the main determinant of investment across all sectors; and, while firm size also generally matters, other factors, notably financing constraints, seem to affect investment, in particular for smaller firms and those who are engaged in the services sector.

Lesotlho (2006) took interest rates, output growth, public investment, and bank credit to the private sector, inflation, real exchange rate, and the level of trade as private investment determinants and co-integration and Error Correction Model of Engle and Granger (1987) was used to test their determination. His empirical investigation revealed that public investment, bank credit to the private sector and the real interest rate affect private investment level in the short run, while GDP growth and real exchange rate affect private investment in the long time.

Another researcher of investment Bbale (2011), incorporated foreign direct investment, public investment, GDP per capita growth, trade openness, bank credit to the private sector, inflation rate and urban population, institutions such as democratic accountability as determinate factors of private investment and uses flexible accelerator model put forward that foreign direct investment crowds out domestic private investment, government institutions appear not directly significant in determining domestic private investment in Sub Saharan Africa (SSA), this does not mean that government indicators are not important at all. Government indicators may help domestic private investment indirectly through the provision of public goods in the form of security, roads, and other telecommunication net works.

Though aggregate financial liberalization and more prominently domestic financial liberalization produced an environment conducive for investment, it could not succeed in creating a sustained increase in capital formation in the post reform period. In other words, firms consider the demand factor, internal liquidity position and past investment decisions etc as the major indicators for future investment. Only index shows strong positive association with corporate investment is index of money market liberalization. It also found that there is significant negative association between index of capital account liberalization and corporate investment. The negative and significant relationship with index of capital account liberalization and investment raises many concerns over the credibility of external (international) financial reforms (Prabhakaran, 2005).

Ouattara (2004) considered public investment, real income and foreign aid, credit to private sector and terms of trade as the major determinant factors of private investment tested his recorded data by bounds test approach as proposed by Pesaran et al. (2001) and co- integration techniques. Finally, he concluded that public investment, real income and foreign aid flows affect positively private investment, at the same time as the impact of credit to private sector and terms of trade was negative.

According to Kazi and Wasow (1992), the main determinants of private investment were availability of credit, availability of foreign exchange, real exchange rate, stock of public infrastructure capital and macroeconomic instability.

The empirical study of Abuka, Egesa, Atai, and Obwona (2006) declared aggregates for a number of firms that responded their types and their levels of investment, capacity utilization, size, age, and form of financing, turnover, the age structure of new capital and evidence of any technological improvement. Some of the factors investigated included and were not limited to capacity utilization, nature and source of investment finance, public capital and role of risk. In regard to these issues, the study found that turnover; profit and credit are significant determinants of firm level investment. The large significant effect of profits on investment suggests that credit constraints are still present among firms. Size remains a significant determinant of investment. Firms within manufacturing tended to invest less over time compared to firms within agriculture and services.

The empirical results of Pattillo (1998) indicated that uncertainty has a negative effect on investment levels and that the effect is significantly greater for firms with more irreversible investment likewise profitability, size of the firm, firm age, expected average demand growth, variation of reversibility, capital/ output, access of employment are determinants of domestic private investment.

A study conducted by Michaelides, Milios, and Roboli (2005) revealed that there is appositive relationship between investment and output, investment and profitability, and negative relation between investment and interest rate.

Uncertainty about the profitability and economic condition of any investment area has created a high cost environment which deters investment, access to finance is limited and this prevents firms investing, investment can be low because of limited growth (Teal, 1999).

Macroeconomic instability and uncertainty deteriorates private investment especially for agriculture by creating uncertain current and future environment (Ahmad & Qayyum, 2008).

Grenier, McKay, and Morrissey (2000) concluded that large firms are more likely to export than other firms, and more large firms sustain their investments than smaller firms. They also found that, independent of this relationship to size, firms that sustain investment are more likely to export than those which do not sustain investment.

Empirical results by Bleaney, Guncavdi, and Mckay (2008) demonstrated that the important role of credit constraints in the determination of private investment firm expenditure was subject to capital market imperfections, borrowing constraints, and capital adjustment costs are the most significant.

Poncet, Steingress, and Vandenbussche (2008) investigated the determinant factors of private investment in China and they demonstrated their finding as firstly, private firms are credit constrained while State-owned firms and foreign-owned firms in are not; secondly, the geographical and sectoral presence of foreign capital alleviates credit constraints faced by private firms. Thirdly, geographical and sectoral presence of state firms aggravates financial constraints for private firms (crowding out).

Infrastructure poses some of the most severe obstacles facing firms. Electricity problems plague, corruption was pervasive, firms view regulation as a serious problem, finance appears to be a looming problem, and small- and medium-size private investment firms were disproportionately affected by all these problems (World Bank, 2003).

Firm level factors such as firm size, dividend payout ratio, and effective cost of borrowing, cash flow ratio and growth in value of production are significant in determining corporate investment decisions. At macro level, capital market developments and real effective exchange rate were significant in influencing corporate investment decisions, whereas, inflation and non-food credit growth were not significant in predicting corporate investment decisions (Jangili & Kumar, 2010).

Blanke, Iarossi, Marilou, and Ondiege (2009) showed that access to finance (availability and cost); access to land; business licensing and permits; corruption; courts; crime, theft, and disorder; customs and trade regulations; electricity; inadequately educated workforce; labor regulations; political instability; competitors' practices in the informal sector; tax administration; tax rates, transportation cost, supplies, and inputs.

Taxes imposed by the government have negative impact on private investment growth because the country which levy highest tax rate on profit of the private investment discourages the expansion as well as interring to the industry as new investor (Haroon & Nasr, 2011).

Empirical study of Aggrey, Mukasa, Ochai, and Ogwal (2012) analyzed firm's perception about the hard infrastructure (telecom, electricity, transportation) and soft infrastructure (problems in tax administration, custom clearance, business regulations, corruption), borrowing interest rates, days to clear customs for exports and imports, number of days of power out ages per year, days to get power connection and days to get telephone connection once all the application found that firm size, firm age, and average education are the main determinants of private investment firm growth in a sample of Ugandan manufacturing private investment firms. These results have important policy prescriptions to affect firm growth.

Private investment investigations of Thu and Van (2008) showed that changes in real private investment in Nigeria were best explained by changes in political trend by a dummy variable representing political instability, macroeconomic instability and poor infrastructure.

Agbontaen and Donwa (2010) made study in Nigeria their result sowed that; past outcome of domestic investment strongly influence the present levels of investment. They were also observed that market fundamentals do not encourage domestic investment, previous values of the rates of exchange had stronger effects on the levels of domestic investment and that macroeconomic and political conditions reveal reasonable levels of instability that inhibits the progress of domestic investment in the economy both on the long and short term basis.

According to the study made by Oriavwote and Oyovwi (2013) significance of government size provides justification for the huge money spent by government in generating the desired infrastructure so as to improve private investment that means huge government expenditure on infrastructure has been make beneficial to private investors. These also indicate the existence of good service delivery and good expenditure pattern. The negatively signed inflation rate is an indication of the detrimental impact of high prices on private investment. The study also indicated that private investment has been influenced by the international competitiveness.

According to Siriwardana (2009), technology, infrastructure, human capital, gross domestic product, domestic credit to the private sector, interest rate, effective exchange rate, public investment, openness of the economy, security situation, and other structural factors that determine the efficiency of the economy are the main determinants of domestic private investment. The areas identified as requiring urgent attention include the maintenance of a sound macroeconomic environment, resolution of infrastructure bottlenecks, seeking of an early solution to end the civil conflict and achievement of a lasting peace, and encouragement and facilitation of the private sector to undertake major projects under public private partnerships to reduce the pressure on the government budget.

In addition, the efforts to implement the identified reforms, while strengthening governance, have to be intensified to create a stronger and a more resilient economy which is conducive for higher level of private investment. Promoting investment in newly liberated areas, public private partnerships, environment for doing business, labor market rigidities and labor laws, structural reforms, higher domestic resources, financial sector, incentive regime are the key determinants of investment (Siriwardana, 2009).

Khan, Rehman, and Arshad (2007) classified factors those affect investment into two broad categories; as economic factors and noneconomic factors. By citing study by Servén and Solimano (1992), they described economic factors that affect private investment especially in developing countries, as level of domestic output, the real interest rate, public investment, and credit available for investment, size of the external debt, the exchange rate, and macroeconomic stability, demand levels, credit constraint, irreversible nature of investment in capital goods. According to scholars in the above; in addition to economic factors stated above, there are some other factors that are important for the rapid private sector investment growth. These include the good governance, quality of institutions and entrepreneurial skills for the private sector to make big investment decisions based on a rational assessment of risks and potential pay offs.

Empirical finding of Khan and Tariq (2008) viewed that private sector output, net capital inflows to the private sector, total sources of funds and past capital stock have all been significant determinants of domestic private investment growth rate, while changes in the volume of bank credit also has a positive effect. It also suggested that if the sector is squeezed for credit there will be a reduction in the level of private investment with adverse impacts on the long term productive capacity of the private sector. Moreover, the result suggested that over all relationship of public and private investment was one of substitutability. It means there was a crowding out effect indicating that most of the physical and financial resources are utilized by public sector, there by exerts a negative influence on private investment.

Asiedu and Freeman (2008) found that the effect of corruption on investments varies significantly across regions: corruption has a negative and significant effect on investment growth for firms in transition countries. Furthermore, among the variables included in their regressions (firm size, firm ownership, trade orientation, industry, GDP growth, inflation and openness to trade) corruption is the most important determinant of investment growth for transition countries.

Empirical results of Luintel and Mavrotas (2005) suggested that the parameters of private investment functions are country specific and they systematically depend on the country specific macroeconomic conditions such as the levels of real income, inflation, real interest rate, and the levels of financial development. Their result also confirmed that real income and income growth on private investment is closely linked to the levels of income, real interest rate and inflation of the country concerned; and hence these parameters are country specific.

Bigsten, Lundvall, and Soderbom (1998) made study in Kenya and their finding revealed that firms are to a small extent relied on external finance when they invest. The fact that most firms do not want loans suggested that it is other factors than restricted accesses to credit that explained this modest degree of investment, for instance the cost of external capital, or the increased bankruptcy risk that follows with formal borrowing. They have found a statistically significant role for cash-flow, although its point estimate implied that investments are not overly sensitive to changes in liquidity; and considerably more important role for productivity, with the estimated elasticity being as high as unity for a subset of firms.

Since the growth and productivity of domestic private investment variable is composition of factors, other than capital and labor, that affect the output value, this means that firms, which manage to exploit profitable opportunities, undertake more investments. The policy implication of these findings was that increased credit access will have a limited effect on investments, unless this is accompanied with a general improvement of the profitability opportunities of the firms. A stagnating manufacturing sector will not start to grow unless there exist profitable projects. Profitable projects as such cannot, indeed should not be accomplished or identified by policy makers. What required is a policy that enables the firms to exploit profitable opportunities (Bigsten, Lundvall, & Soderbom, 1998).

The empirical study made by Charles et al. (2006) found that turnover, profit, and access to credit were significant determinants of firm level investment. The large significant effect of profits on investment suggested that credit constraints are still present among firms. The results also confirmed that the profit effect is larger for small and medium sized enterprises compared to the large firms. However contrary to their expectation credit was not a significant factor on investment for small and medium sized private investment firms. In their estimation, simple regression and correlation analysis model of econometrics were employed.

The empirical results of Acosta and Loza (2005) suggested that investment decisions seem to be determined, in the short run, by shocks in returns (exchange rate, trade liberalization) and in aggregate demand. Besides, there is evidence of a crowding out effect of public investment. In the long run, the capital accumulation path seems to be closely dependent on both well-developed financial and credit markets and on perspectives of fiscal sustainability.

Empirical result of Udah (2010) revealed that credit to the private sector was a significant factor in stimulating private investment in Nigeria. In addition, interest rate, political stability and external debt were significant factors. The paper recommends the need to urgently strengthen the budget preparation and execution process in Nigeria. This, in the opinion of the author, would substantially improved service delivery and efficiency of government expenditure.

Le (2004) reported that socio-political instability characterized by nonviolent protests promotes private investment while violent uprisings hinder private investment; regime change instability characterized by constitutional government change promotes private investment while unconstitutional government change hinders private investment; and policy uncertainty characterized by variability of contract enforcement rights promotes private investment while variability of government political capacity hinders private investment.

Study made by Ninh, Hermes, and Lanjouw (2001) has showed the relationship between investment and uncertainty is influenced by the extent to which investments are irreversible. In particular, the results indicate that when the degree of irreversibility increases, this increases the negative association between uncertainty and investment.

Prudent government financing that attenuates deficits, financial credit channels form government to the private sector, taming inflation, infrastructure, political and economic instability, external debt burden of the country, political and civil liberties, risk level of the investment, and level of profitability are the determinants of private investment (Kwasi, Mlambo, & Oshikoya, 2001).

According to Sinha and Fiestas (2011), investment climate constraints can be grouped into five broad categories:

- Macro environment constraints, such as macro level stability, crime and corruption.
- Institutional constraints, including business regulations, legal and tax systems.
- Financial constraints, such as access to credit and cost of finance.
- Infrastructure constraints, including electricity and roads.
- Micro-level constraints, such as technology transfer and quality of management

The survey made by World Bank (2004) revealed three pivotal features of the Ethiopian private investment sectors by taking manufacturing sector as a sample. First, labor costs in Ethiopia are very low compared with those of potential competitors in and outside Africa (for example, labor costs in Ethiopia are almost one-third of those in China. Second, despite this huge cost advantage, exporting Ethiopian firms account for less than 8 percent of the population of firms, this is very small by any standard. Third, the Ethiopian manufacturing is also dominated by small private firms, which suggests limited firm growth. To explain these stylized facts about the manufacturing sector in Ethiopia, their analysis was focused on the concept of "value added per worker," which provides a measure of labor productivity (net of labor cost). Moreover, the study also found several constraints to doing business as private of them such as tax rates and tax administration as constituting the most serious impediments in all regions of the country. Another factor that firms identified as a major business impediment, again with noticeable regional variation, is access to land. Their results also showed that access to and reliability of infrastructure services (power and telecommunications) have been among the other major business obstacles, as indicated by the long waiting time to get connected and frequent interruptions once connected. A fourth set of constraints was banks' cumbersome credit procedures, perceived corruption in their credit allocation, and stringent collateral coverage requirements (World Bank, 2004).

In Ethiopia even though Massive public investments are set to deliver a wide range of public goods roads, railways, power plants, schools, and clinics while simultaneously propping up thousands of private companies involved in building and maintaining these brand new facilities; high inflation has been and remains a major weakness of economic policy, and poses serious threats to the business environment by discouraging savings and distorting investment decisions. Abrupt and challenging regulatory changes have also brought additional pressures to businesses in the areas of licensing, registration, taxation, retailing, land acquisition, real estate, and banking are the major overwhelming pressures in Ethiopia's current economic climate and are putting strains on private business and could potentially denote the country's positive growth prospects (Access Capital, 2011/12).

Major problems of private investment in Ethiopia were: weak infrastructure, lack of skilled workers, high transportation costs, delay of privatization, restrictions on international investment, and difficulty in access to finance, lack of financial services, and lack of information on investment/market (Embassy of Japan, 2008).

Empirical investigation of Wondmagegn (2011) has reported the critical challenges of domestic private investment as infrastructures and religious condition, location factors, social factors, administrative factors, environmental factor, consumer growth factor, marketing factors, factor related with financial institutions, technological factors, regulatory factors, taxation factor, factors related with illegal trade, financial factors, and inflationary factors.

On the other hand, empirical study conducted in Ethiopia by Tamirat (2005) revealed that the major challenges/ determining factors of domestic private investments were lack of start-up capital, limited access to land, weak marketing infrastructure, long bureaucratic procedures, limited access to credit, and corruption.

The most serious factors that affect private investment were lack of bank loan, foreign exchange control, infrastructure, profitability and affordability of initial capital, access to finance, previous business experience and skill of managers (Dawit, 2010).

Collateral requirement of banks; interest rate, foreign exchange and land issue, access to credit, infrastructure situation, custom services, legal system, road facility, telecommunication, electricity, water, financial and economic policies, tax administration, skilled labor, theft & disorder, labor policy, government encouragement, incentives, access to market, political stability, access to raw materials, access to labor, and existing technological were the key determinants for private investment development and growth (Mehabaw, 2011).

Despite much opportunity, significant challenges to business operations remain. Ethiopia is a landlocked country and, consequently, transportation for imports and exports, while mostly dependable, can be slow. Some government agencies still suffer from bureaucratic inefficiencies; power supply can be erratic; and the land-acquisition process can be complex and time-consuming (Cannon, 2009).

Micro level study by Kefay (2005) and Kenzu (2012) showed that education, access to land, access to credit, infrastructure facilities, investment incentives, corruption and bureaucratic red tape were the most important determinants of private investment in the study areas. Moreover, the micro level study result indicated education, access to land, access to credit, infrastructure facilities, and investment incentives were positively and significantly related with private investment. Corruption and bureaucratic red tape were negatively and significantly associated with private investment.

From the above reviewed empirical evidences, the explanatory variables considered in this study to analyze domestic private investment growth were: business tax rate, interest rate of formal financial institutions, educational level of the manager or operator, firm size in terms of employees size, access to adequate market, access to land, age of the firm, corruption, type of the investment firm, investment incentives, practice of competitors, access to finance, and access to infrastructure. Even though all the determinant factors reviewed in this chapter have a positive or negative impacts on the growth of domestic private investment globally as well as locally, depending on the given time and budget the researcher believes that the selected variables seem to be especially relevant to the selected study area.

3. STATEMENT OF THE PROBLEM

A key challenge facing Mekelle City has been identifying the major factors affecting the domestic private investment and come up with policies that would help raise private investment in order to stimulate and sustain economic growth (Tigray Investment Agency, 2013). Therefore, it is important and timely to identify the determinants of private investment growth and their effect on the private investment in the city.

Moreover, since the concept and determinant factors of domestic private investment are dynamic and broad in nature, the previous research findings of other countries and regions in Ethiopia may not represent the selected area in this study. On top of that as the main focus of most previous studies conducted in Ethiopia was on the macro level determinant factors using secondary time series data for the whole private investment (domestic as well as foreign), the main determinant factors of the domestic private investment sector at firm level has been overseen and not yet investigated in Mekelle City. Thus, the study has examined the domestic private investment growth in Mekelle City.

4. OBJECTIVE OF THE STUDY

The objective of the study was to identify and analyze the determinants of domestic private investment firm growth in Mekelle City.

5. RESEARCH METHODOLOGY

The total number of private investment registered in Mekelle Investment Office in the year up to 2013 were 1,631; out of this total private investment, 406 domestic private investment projects (firms) were fully in operation and the remaining were in pre-implementation and implementation phase. The distribution of the private investment to each economic sector as well as the stage of the project as whether in pre- implementation, implementation or operations phase are shown below (Table 1).

TABLE 1: MEKELLE CITY'S DOMESTIC PRIVATE INVESTMENT STATUS

Economic sector of investment	Actual status (phase)	Number of projects
Manufacturing	Pre-implementation	248
	Implementation	175
	Operation	154
	Total	**577**
Agriculture	Pre-implementation	43
	Implementation	15
	Operation	26
	Total	**84**
Construction	Pre-implementation	552
	Implementation	27
	Operation	125
	Total	**704**
Service	Pre-implementation	94
	Implementation	65
	Operation	90
	Total	**249**
Trade	Pre-implementation	5
	Implementation	1
	Operation	11
	Total	**15**
Total		**1631**

Source: Mekelle City Investment Office (2013)

5.1. STUDY DESIGN

The study employed an explanatory research design. The major purpose of explanatory research is to determine the cause and effects of dependent and independent variables. It is the most appropriate design for identifying the relationships between the growth of domestic private investment and its explanatory variables. Furthermore, the study used cross-sectional data. The reason for preferring a cross-sectional study was due to the limitation of enough and well recorded time series data. A quantitative research approach was also used.

5.2. DATA SOURCES AND COLLECTION TECHNIQUES

The study collected data from primary sources. The primary data was obtained through semi-structured questionnaire. The operators/owners of the domestic private investment firms completed the questionnaire.

5.3. SAMPLING TECHNIQUE

Systematic random sampling type of probability sampling was employed in selecting each element of the sample size, where every element in the population has the same chance of being selected. It involves selection of every k^{th} element in the sampling frame where k is the ratio between number of elements in the population and the sample size.

5.4. SAMPLE SIZE

This study was conducted in Mekelle City. According to Table 1 above, the total numbers of private investments registered in Mekelle City Investment Office were 1,631; out of this, 406 domestic private investments were fully in operation and the remaining was in pre-implementation and implementation phase. The 406 domestic private investments which were in operation were the population of this study. 136 sample respondents were sampled at 7% error term by using the formula provided by Yamane (1967) and each 3rd domestic private investment was selected from the lists of 406 firms in operation until 136 investment firms were reached.

5.5. METHODS OF DATA ANALYSIS AND PRESENTATION

Data was edited in order to identify error and omissions, coded, classified, and entered in to STATA for further analysis. After the data processing, the primary data collected via questionnaire was analyzed by using an econometric model called OLS (Ordinary Least Square) regression model to test the relationships between and among variables.

5.6. LITERATURE DERIVEN HYPOTHESIS

Hypotheses were formulated with an intent to determine whether a relationship exists between the dependent and independent (explanatory) variables, that is supported by literature, in the selected study area. The following 14 explanatory variables were considered for analysis.

Hypothesis 1: The higher the rate of taxes for domestic private investment firm, the higher the possibility to growth.
Hypothesis 2: Investment incentives have a possible negative relationship with domestic private investment growth.
Hypothesis 3: Domestic private investment growth has a negative relationship with access to finance.
Hypothesis 4: Size of the firm and domestic private investment growth have negative relationship.
Hypothesis 5: Interest rate has a positive impact on domestic private investment growth.
Hypothesis 6: Access to infrastructure has a negative association with domestic private investment growth.
Hypothesis 7: Corruption has positive impact on the growth of domestic private investment.
Hypothesis 8: Firm age and domestic private investment growth have a negative relationship.
Hypothesis 9: Types of investment is not determinant factor for the growth of domestic private investment.
Hypothesis 10: Manager /owner's level of education and domestic private investment growth has a possible negative relationship.
Hypothesis 11: Access to adequate market and domestic private investment growth has a negative relationship.
Hypothesis 12: Practice of competitors has no impact on the growth of domestic private investment.
Hypothesis 13: Access to land has a negative impact on the growth of domestic private investment.
Hypothesis 14: Economic instability has no impact on domestic private investment growth.

5.7. MODEL SPECIFICATION

OLS model was used to examine the relationship between the independent (explanatory) variables and dependent variable (growth of domestic private investment firm), and the effect of the explanatory variables on the domestic private investment growth. Based on the review of the theoretical and empirical literature, discussed above the following functional model was used for this study:

DPRIFG = ƒ(Tax, INCE, FIN, FIRMsz, INTR, INFR, CORR, ECOC, FIRMage, TYPinv, EDUlev, MKT, COMPUT, LND). And depending on this functional model, the following ordinary least square (OLS) model was constructed:

$$DPRIFG = \beta_0 + \beta_1 Tax + \beta_2 INCE + \beta_3 FIN + \beta_4 FIRMsz + \beta_5 INTR + \beta_6 INFR + \beta_7 CORR + \beta_8 ECOC + \beta_9 FIRMage + \beta_{10} TYPinv + \beta_{11} EDUlev + \beta_{12} MKT + \beta_{13} COMPUT + \beta_{14} LND + \acute{\varepsilon} \quad \ldots\ldots(1)$$

Where DPRIFG = Domestic private investment firm growth; Tax = existing current business tax condition; INCE = Incentive provided for domestic private investment by the government; FIN = access to finance; FIRMsz = size of the private investment firm expressed in terms of number of employees; INTR = existing interest rate of loan (users cost of capital); INFR = condition of the existing infrastructure; CORR = influence of corruption on growth; ECOC = economic condition; FIRMage = age of the firm; COMPUT=Practice of competitors; MKT = market condition in terms of access; EDUlev= Educational level of the firms manager/owner; TYPinv = type of investment(service, manufacturing, agriculture, trade, construction); LND = Access to land and $\acute{\varepsilon}$ random error term.

Finally, the explanatory (independent) variables, variable type, measurement scale, method of econometrics used to analyze and expected signs are summarized below.

TABLE 2: SUMMARY OF INDEPENDENT VARIABLES FOR DESCRIPTIVE ANALYSIS

No	Name of the Independent Variable	Variable Type	Measurement Scale (to describe)	Expected Sign (alternative hypothesis)
1	Educational level	Categorical	1 = 1-8 years of formal education, 2 = 9-12 high school, 3 = vocational training and diploma holders, 4 = first degree, 5 = second degree and above	Negative
2	Age of the firm	Continuous (in terms of years)	Interval (grouped) scale	Negative
3	Firm size	Continuous (number of employees and capital size)	Continuous	Negative
4	Investment type	Dummy	1 = Manufacturing, 2 = Agriculture, 3= Construction, 4 = Service , and 5 = Trade	
5	Tax rate	Categorical	1 = prevailing tax rate is low, 2 = medium, and 3 = high	Positive
6	Interest rate	Categorical	1 = prevailing interest rate is low, 2 = medium, and 3 = high	Positive
7	Access to finance	Categorical	1 = existing financial accessibility has no effect on their investment growth, 2 = moderate effect, 3 = significant effect	Negative
8	Investment incentive	Categorical	1, 2, 3, 4 & 5 if respondents benefited from investment incentives was very low, low, moderate, high, and very high influence on their investment growth respectively,	Negative
9	Economic condition	Categorical	1 = existing economic condition has no effect on their investment growth, 2 = moderate effect, 3 = significant effect	
10	Infrastructure access	Categorical	1 = existing level of infrastructure has no effect on their investment growth, 2 = moderate effect, 3 = significant effect	Negative
11	Market access	Categorical	1 = existing level of market condition has no effect on their investment growth, 2 = moderate effect, 3 = significant effect	Negative
12	Practice of competitors	Categorical	1 = existing practice of competitors has no effect on their investment growth, 2 = lower effect, 3 = moderate effect, 4 = significant effect	Neither
13	Corruption	Categorical	1 = existing level of corruption has no effect on their investment growth, 2 = moderate effect, 3 = significant effect	Positive
14	Land	Categorical	1 = access of land has no effect on their investment growth, 2 = moderate effect, and 3 = significant effect respectively.	Negative

Source: Own Design (2013)

5.8. MODEL TESTS

OVERALL MODEL FITNESS

If the p-value of F-test is greater than the degree of freedom 0.1(10% as a rule of thumb), the model could not fulfill the overall fitness requirement (Black, 2010; Carlson, Newbold, & Thorne, 2010; Wooldridge, 2009). Thus, in this study the overall significance of the multiple regression model was tested an analogous test for significance of F statistic and the P-value was 0.0000 which is less than 5%. Hence the requirement for fitness of model was safely fulfilled.

HETEROSKEDASTICITY TEST

According to Colin and Trivedi (2009) and Wooldridge (2009), such problems can be checked by using Breusch–Pagan test for Heteroscedasticity (BP test) test. If the BP test results in a small enough P-value that is below the chosen significance level, i.e., 1% or 5% or 10 %, then the null hypothesis of homoskedasticity is rejected and correction measures should be taken. One possibility is to just use Heteroscedasticity robust standard errors estimator of the OLS estimator.

In this study, the model was checked via BP Heteroscedasticity (hettest); the test result showed P-value of 0.1845 (18.45%), which is greater than the significance level (1%, 5%, and 10%). Thus, the result indicated that there is equal variance among the error terms. Therefore, there was no serious problem of Heteroscedasticity in the process of model specification and the model was well fitted.

MULTICOLLINEARITY TEST

The problem of multicollinearity arises when the inter correlation between predictor variables is high. Multicollinearity problem could be checked via variable inflation factor (VIF). Rule of thumb for a multicollinearity test of the model states that an explanatory variable whose values are greater than 10 or whose 1/VIF values are less than 0.10 (10%) indicate the possible and intolerable problem of multicollinearity (Greene, 2003). Therefore, in this study, the test result showed that there was no value greater than 10, all values of variance inflation factors were less than 1.97. Hence, the model employed in this study has no serious problem of multicollinearity.

CORRELATION TEST

If the correlation between each variable is greater than or equal 0.5 or -0.5, results could show the existence of perfect positive or negative (serious problem) of correlation (Greene, 2003). This study tested the model for checking such correlation problem using pair wise correlation test and the result showed that the pair wise correlation of all variables were different from 0.5 as well as -0.5 (i.e., between 0.4 and -0.3). Thus, based on the given result and its justification, there was no intolerable problem of correlation.

COEFFICIENT OF DETERMINATION TEST

A widely used measure of fit for regression models is the coefficient of determination, or R^2. Even though there is no absolute base in terms of values one normally encounters in cross sections, an R^2 of 0.50 is relatively high (Greene, 2003). Having this fact, the model was checked for the level of coefficient of determination and the result was 0.5658 (56.58%), which means 56.58 percent of the domestic private investment growth variable could be explained by the considered explanatory variables. Thus, the coefficient of determination was more than the minimum requirement. So, the OLS regression model used in this research study was preferably relevant and appropriate (i.e., fit).

OMITTED VARIABLES

The link test and Ramsey RESET test for omitted variables are commonly used methods in the test. As a decision rule according to Ramsey **RESET** test, a model specification is fit for regression analysis if the p-value stated in P>F is greater than the chosen level of significances, i.e., 1%, 5% and 10%. In this study the model was tested via Ramsey RESET **estat ov (omitted variable) test**. Accordingly, the result indicated that the model had no relevant omitted variables since the test failed to reject the hypothesis, i.e., Prob.>F of 0.1200 is found greater than any of the significance levels of the specified model of the study.

6. RESULTS AND DISCUSSIONS

This section of the study presents the results and discussions of the econometrics/regression analysis. The regression model was developed in order to investigate the relationship between domestic private investment growth (dependent variable) and the hypothesized determinant factors (independent variables). Besides, in order to further investigate the effect of the explanatory variables on domestic private investment growth, two cross sectional linear regression models analysis of determinant factors of domestic private investment growth in terms of employment size, and capital size (for comparison) were employed.

TABLE 3: OLS REGRESSION RESULT OF DETERMINANTS OF DOMESTIC PRIVATE INVESTMENT FIRM GROWTH IN TERMS OF EMPLOYMENT SIZE

Variable	Coefficient	Standard error	t t	P>|t|	[95%confidence interval]	
Tax rate	-.2854828	.1120184	-2.55	0.007*	-.5074329	-.0635326
Investment incentives	-.1564001	.0399213	-3.92	0.000*	-.235499	-.0773012
Access to finance	-.2290259	.0986093	-2.32	0.022**	-.4244075	-.0336442
Firm size	-.0000506	.0000596	-0.85	0.398	-.0001686	.0000675
Interest rate	.2583537	.0987274	2.62	0.010*	.0627381	.4539693
Access to infrastructure	.1197238	.0556814	2.15	0.034**	.0093983	.2300492
Corruption	.1967366	.0658811	0.15	0.881	-.120643	.1404267
Firm age	-.0885684	.0180513	-4.91	0.000*	-.1243348	-.0528019
Educational level Managers (owners)	.0185418	.0230224	0.81	0.422	-.0270742	.0641578
Access to adequate market	.1477785	.0862785	1.71	0.090***	-.0231713	.3187284
Practice of competitors	.0455585	.0776313	0.59	0.558	-.108258	.199375
Access of land	.0878421	.0665315	1.32	0.189	-.0439814	.2196657
Economic condition	.1627067	.0905343	1.80	0.075***	-.0166754	.3420889
Construction	-.0371089	.0408558	-0.91	0.366	-.1180595	.0438416
Agriculture	-.0769297	.0392586	-1.96	0.053 **	-.1547156	.0008562
Service	-.1042261	.0301364	-3.46	0.001*	-.1639375	-.0445147
Trade	-.1800409	.0493263	-3.65	0.000 *	-.2777746	-.0823073
Constant	1.190352	.4106994	2.90	0.005	.3766039	2.0041
Note: * represents statistically significant at 1% level ** represents statistically significant at 5% level *** represents statistically significant at 10% level						

Source: STATA output of own survey (2013)

As it is summarized in Table 3 above, the explanatory power of the variables used in this model, from the R-squared values was equal to 56.58%. This implies that 56.58% of the changes in domestic private investment growth were successfully explained by the variables incorporated in this model. However, the remaining 43.42% of the changes in domestic private investment growth were caused by other factors that were not included in the models of this study. These results indicated the overall goodness-of-fit of the models used in this study. Moreover, the overall significance of the model when measured by their respective F- statistics of 10.25 with P-values of 0.0000 indicated that this models were well fitted at 1% level of significance. It can be inferred from the results of R-squared and F-statistics that the implemented model was well fitted, that is the determinant factors of domestic private investment growth have a significant effect on domestic private investment growth. Therefore, the following part of the analysis discusses the identified determinant factors of domestic private investment growth and analyzes the way (direction of relationship) the dependent variables are related with independent variables.

HYPOTHESES TESTING

HYPOTHESIS 1: THE HIGHER THE RATE OF TAXES FOR DOMESTIC PRIVATE INVESTMENT FIRM, THE HIGHER THE POSSIBILITY TO GROWTH.

The business tax rate variable has a coefficient estimate of about -0.29, and it is statistically significant at 1% level of significance. This implies that growth of domestic private investment was negatively related with the increase in business tax rate for domestic private investment. In other words, the higher the business tax rate in domestic private investment, the lower their investment growth and expansion achievement, and vice versa. Therefore, the current level of business tax rate negatively determined the growth of domestic private investment in the city during the period. As long as it is an attitude of the private investment owners (managers), the limitation of internal measure of tax rate data are likely to be influenced by firm specific attributes such as firm size and firm age. For example, investment tax ratings provided by large firm may be different from the tax ratings provided by smaller firms. The level of tax rate for domestic private investment may also be over reported as most respondents are reluctant to pay tax and some feelings are obvious while raising questions about providing answers to perception.

HYPOTHESIS 2: INVESTMENT INCENTIVES HAVE A POSSIBLE NEGATIVE RELATIONSHIP WITH DOMESTIC PRIVATE INVESTMENT GROWTH.

The existing incentive for domestic private investment variable has a coefficient estimate of about -0.16; and it is statistically significant at 1% level of significance. It implies that growth of domestic private investment was negatively related with the given level of incentive. In other words, as the investment incentive in domestic private investment increases by one unit, the domestic private investment growth declines by about 16% and vice versa. This inconsistency may happened due to the limitation of internal measure of incentive data are likely to be influenced by firm specific attributes such as firm size, firm age, and level of priorities of the national as well as regional governments. For example, investment incentive ratings provided by large firm may be different from the ratings provided by smaller firms; ratings provided by manufacturing type of investment may be different from incentive ratings provided by service and trade type of domestic private investment. Another possible reason for inconsistency of the result may also be the fact that incentive of domestic private investment may be under reported as the respondents might have been unforthcoming about providing answers to the perception related questions provided in the questionnaire.

HYPOTHESIS 3: DOMESTIC PRIVATE INVESTMENT GROWTH HAS A NEGATIVE RELATIONSHIP WITH ACCESS TO FINANCE.

The variable representing the presence of financial access constraint has coefficient estimate of about -0.23 it is statistically significant at 5 percent level of significance. The coefficient implies that growth of domestic private investment was negatively related with the level of financial constraint. In other words, other things remain constant one unit increase in financial constraint decreases the domestic private investment by about 23%, or the higher the financial constraint in domestic private investment, the lower the investment growth and expansion achievement were and vice versa. Therefore the existing financial access constraint negatively and significantly determined domestic private investment growth in the study area.

HYPOTHESIS 5: INTEREST RATE HAS A POSITIVE IMPACT ON DOMESTIC PRIVATE INVESTMENT GROWTH.

The formal financial institution loan interest rate variable has coefficient estimate of about 0.26 and it is statistically significant at 5 percent level of significance. The coefficient of borrowing interest rate variable implies that growth of domestic private investment was positively related with the level of financial institutions loan interest rate. In other words, one unit increment of interest rate in financial institutions loan, increases the domestic private investment growth and expansion achievement and vice versa. Hence, the result reveals that growth of the domestic private investment was positively determined by formal financial institutions loan interest rate.

HYPOTHESIS 6: ACCESS TO INFRASTRUCTURE HAS A NEGATIVE ASSOCIATION WITH DOMESTIC PRIVATE INVESTMENT GROWTH.

The infrastructural access representing variable has coefficient estimate of 0.12 and it is statistically significant at 5 percent level of significance. The coefficient implies that growth of domestic private investment was positively related with the level of infrastructural access for the investors. In other words, one unit increase in the infrastructure access increases domestic private investment growth and expansion achievement opportunity by about 12% and vice versa. Therefore infrastructural access was positively influencing the growth of domestic private investment in the study area. Recently, the national as well as regional governments have paid due attention to take on the main and enormous infrastructural projects in the region. These infrastructural projects have dual advantages for the domestic private investment growth; (1) by reducing transportation cost, saving time, facilitating and shortening market chain for products produced by domestic private investment for example the road, telecommunications, and power projects and (2) by creating market opportunity for the domestic private investment themselves for example construction type of investment may participate in construction of infrastructure as contractors or consultants, manufacturing type of domestic investment may sell their products as inputs for the infrastructural projects and so on.

HYPOTHESIS 8: FIRM AGE AND DOMESTIC PRIVATE INVESTMENT GROWTH HAVE A NEGATIVE RELATIONSHIP.

The relationship between firm age and domestic private investment growth is expressed by the coefficient estimate of -0.09, which is statistically significant at 1 percent level of significance. This value of coefficient implies that year increase in age of the firm decreases growth of domestic private investment by about 9% and vice versa. Therefore growth of the domestic private investment was negatively related with the age of the firm concerned. In other words, age of the firm negatively determined investment growth and expansion achieving opportunity and vice versa.

HYPOTHESIS 9: TYPES OF INVESTMENT IS NOT DETERMINANT FACTOR FOR THE GROWTH OF DOMESTIC PRIVATE INVESTMENT.

In order to analysis the variation among the different investment sectors operating in the city a dummy variable "type of investment" was established in the regression model and the sectors were evaluated taking the manufacturing sector as a base for comparison. The manufacturing sector was selected as a base because this sector has been relatively growing better than the other sectors in the city and it reasonable to consider it a point of reference in this study. Accordingly the study result is presented below.

The relationship between the agriculture type of domestic private investment variable and manufacturing type of domestic private investment growth has coefficient estimate -7.69. This was statistically significant at 10 percent level of significance. This coefficient implies that the two stated variables were negatively related in the period of study. In other words, the agricultural type of domestic private investment has been growing by about 7.69 percent less than the manufacturing type of domestic private investment or to put it differently, the manufacturing type of domestic private investment has been growing by about 7.69 percent greater than the agricultural type of domestic private investment in the city.

On the other hand the service type of domestic private investment has coefficient estimate of -10.42 in relation to the manufacturing type of domestic private investment growth, and the estimate was statistically significant at 1 percent level of significance. The value of this coefficient implies that the service type of domestic private investment growth was negatively related to the manufacturing sector growth. To be specific the service type of domestic private investment has been growing by about 10.42 percent less than the manufacturing type of domestic private investment or the manufacturing type of domestic private investment has been growing by about 10.42 percent greater than the service type of domestic private investment in the city.

When we see the link between the trade type of domestic private investment and manufacturing type of domestic private investment growth, we observe that the coefficient estimate is about -18 percent and it is statistically significant at 1 percent level of significance. This coefficient suggests that the two variables were negatively related. In other words, the trade sector of domestic private investment has been growing by about 18 percent less than the manufacturing type of domestic private investment or putting it differently, the manufacturing type of domestic private investment has been growing by about 18 percent greater than the trade type of domestic private investment in the city.

Finally the correlation between construction type of domestic private investment and manufacturing type of domestic private investment growth was determined and the coefficient estimate was -3.71 percent which is statistically insignificant at all. Even though the value of the coefficient was insignificant, the relationship between the concerned variables was negative. In other words, the construction type of domestic private investment has been growing by about 3.71 percent less than the manufacturing type of domestic private investment or the manufacturing type of domestic private investment has been growing by about 3.71 percent greater than the construction type of domestic private investment in the city.

HYPOTHESIS 11: ACCESS TO ADEQUATE MARKET AND DOMESTIC PRIVATE INVESTMENT GROWTH HAS A NEGATIVE RELATIONSHIP.

The coefficient estimate of the relationship between the current market access and domestic private investment growth was about 14.7 percent and it was statistically significant at 5 percent level of significance. This positive coefficient indicates that the two variables were positively related with each other. In other words, the present market access positively determined the domestic private investment growth, and expansion opportunity in the city and vice versa.

HYPOTHESIS 14: ECONOMIC INSTABILITY HAS NO IMPACT ON DOMESTIC PRIVATE INVESTMENT GROWTH.

The economic condition variable has coefficient estimate of 0.16 and it was statistically significant at 10 percent level of significance. The coefficient implies that growth of domestic private investment was positively related with the present economic condition. This indicates that an increase one unit in conducive economic condition increases domestic private investment growth and expansion by about 16% and vice versa. So, the existing economic condition has positively determined the growth of domestic private investment in the city. The rationale behind this fact, the country is at progressive economic development and growth. Of course the existing inflationary condition may have its own negative effect on the growth. But, as long as different measures were taken by the regional and national governments to address the inflation, the influence of the existed economic condition was overall positive.

HYPOTHESIS 4: SIZE OF THE FIRM AND DOMESTIC PRIVATE INVESTMENT GROWTH HAVE NEGATIVE RELATIONSHIP.

HYPOTHESIS 7: CORRUPTION HAS POSITIVE IMPACT ON THE GROWTH OF DOMESTIC PRIVATE INVESTMENT.

HYPOTHESIS 10: MANAGER /OWNER'S LEVEL OF EDUCATION AND DOMESTIC PRIVATE INVESTMENT GROWTH HAS A POSSIBLE NEGATIVE RELATIONSHIP.

HYPOTHESIS 12: PRACTICE OF COMPETITORS HAS NO IMPACT ON THE GROWTH OF DOMESTIC PRIVATE INVESTMENT.

HYPOTHESIS 13: ACCESS TO LAND HAS A NEGATIVE IMPACT ON THE GROWTH OF DOMESTIC PRIVATE INVESTMENT.

The relation between level of corruption, firm size, and educational level of the owner (manager), computation method of competitors, and land access and domestic private investment growth has coefficient estimates about 19.7%, 0%, 1.9%, 4.6% and 8.8%, respectively but they were statistically insignificant. The coefficient of corruption level, firm size, educational level, computation method of competitors, and land access in relation to domestic private investment growth implies that growth of domestic private investment was positively related with educational level of the manager (owner), computation method of competitors, land access for investment; and negatively related with firm size even though their relation was statistically insignificant. In other words educational level of the manager (owner), computation method of competitors, land access for investment, of the investment has positively determined the domestic private investment growth, expansion achievement opportunity and vice versa with statistically insignificant.

The level of corruption in domestic private investment growth has coefficient estimates of about 19.7 percent it was statistically insignificant. The coefficients of existed level of corruption in domestic private investment imply that growth of domestic private investment was positively related with the level of corruption in domestic private investment. In other words, the level of corruption in the domestic private investment has insignificant effect on domestic private investment growth and expansion achievement opportunity. This insignificancy may be due to the limitation of internal measure of corruption data are likely to be influenced by firm specific attributes such as firm size. For example, corruption ratings provided by large firm may be different from the ratings provided by smaller firms. Another possible reason for insignificance of this determinant variable is that corruption may be under reported as respondents may be reserved about providing answers to sensitive questions like corruption.

The variable Owners (managers) level of education showed a positive determination but statistically insignificant. The determinant factor of domestic private investment land access showed a positive but statistically insignificant. The variable firm size showed a negative but statistically insignificant.

The computation methods used by each competitor have positive and statistically insignificant.

In summary the OLS result shown in Table 3 above revealed that level of investment tax, investment incentives, financial constraint, and firm age negatively and significantly determined the domestic private investment growth in Mekelle City. But level of interest rate for loan, infrastructural access, economic condition and market access in the City positively and significantly determined the domestic private investment growth in the City. The remaining proposed determinant factors of the domestic private investment viz. land access, compotators practice, educational level of the owners (managers) and corruption level were positively and insignificantly determined the investment growth but firm size exceptionally showed negative and insignificant impact on the domestic private investment growth in Mekelle City.

TABLE 4: OLS REGRESSION ESTIMATION RESULT OF DETERMINANTS OF DOMESTIC PRIVATE INVESTMENT GROWTH IN CAPITAL SIZE

Variable	Coefficient	Standard error	t t	P>|t|	[95%confidence interval]	
Tax rate	.1447543	.2436353	0.59	0.554	-.3379778	.6274864
Investment incentives	.0336506	.0997854	0.34	0.737	-.1640614	.2313626
Access to finance	.0182217	.200187	0.09	0.928	-.3784231	.4148665
Firm size	-.0001852	.0000837	-2.21	0.029**	-.0003511	-.0000194
Interest rate	.1130381	.2540133	0.45	0.657	-.3902566	.6163328
Access to infrastructure	.1507595	.1682116	0.90	0.372	-.1825302	.4840493
Corruption	-.0513604	.1276872	-0.40	0.688	-.3043562	.2016354
Firm age	.0313488	.0462681	0.68	0.499	-.0603256	.1230232
Educational level Managers (owners)	.0740455	.0617267	1.20	0.233	-.048258	.1963489
Access to adequate market	-.5425248	.2387682	-2.27	0.025**	-1.015613	-.0694361
Practice of competitors	-.0709106	.169193	-0.42	0.676	-.4061448	.2643236
Access of land	.244809	.2043016	1.20	0.233	-.1599885	.6496065
Economic condition	.4880422	.2540967	1.92	0.057***	-.0154177	.9915022
Construction	-.1237541	.1062351	-1.16	0.247	-.3342453	.0867371
Agriculture	-.1638469	.0689524	-2.38	0.019**	-.3004672	-.0272265
Service	.3961748	.0956457	4.14	0.000*	.206665	.5856846
Trade	.0244698	.1159007	0.21	0.833	-.2051725	.2541121
Constant	-1.738804	1.153811	-1.51	0.135	-4.024934	.5473249
Note: * represents statistically significant at 1% level ** represents statistically significant at 5% level *** represents statistically significant at 10% level						

Source: STATA output of own survey (2013)

As it is summarized in Table 4 above, the explanatory power of the variables used in this model, from the R-squared values were equal to 20.25 percent. This implies that 20.25 percent of the changes in domestic private investment growth were successfully explained by the variables incorporated in this model of this study. However, the remaining 79.75 percent of the changes in domestic private investment growth were caused by other factors that are not included in the models of this study. These results indicated that overall goodness-of-fit of the models used in this study.

Moreover, the overall significance of the model, when measured by their respective F- statistics of 85.60 with P-values of 0.0000; indicates that this models was well fitted at 1 percent level of significance. Here one can infer from the results of R-squared and F-statistics that the implemented model of this research was well fitted that determinant factors of domestic private investment growth have a significant effects on domestic private investment growth even though it was not as strong as in the case of emplacement size. Therefore, the following part of the analysis enables the researcher to identify the possible determinant factors of domestic private investment growth that affect domestic private investment growth and to analyze the way (direction of relationship) in which dependent variable was related with independent variables.

The relation between the firm size and domestic private investment growth has coefficient estimates of -0.0001852; it was statistically significant at 5 percent level of significance. The coefficient of market access in relation to domestic private investment growth implies that growth of domestic private investment was negatively related with the existed market access. In other words, the capital size of the investment has negatively determined the domestic private investment growth, expansion achievement opportunity was and vice versa.
The relation between the existed economic condition and domestic private investment growth has coefficient estimates of about 48.8% it was statistically significant at 10 percent level of significance. The coefficient of economic condition in relation to domestic private investment growth implies that growth of domestic private investment was positively related with the existed economic condition. In other words, the existed economic condition of the investment has positively determined the domestic private investment growth, expansion achievement opportunity and vice versa.
The relation between the existed market access and domestic private investment growth has coefficient estimates of -54.3 percent it was statistically significant at 5 percent level of significance. The coefficient of market access in relation to domestic private investment growth implies that growth of domestic private investment was negatively related with the existed market access while it measures in terms of capital. In other words, the existed market access of the investment has negatively determined the domestic private investment growth, expansion achievement opportunity and vice versa.
The relation between existed business tax, investment incentive, financial constraint, interest rate of loan, infrastructure, firm age, land access, level of corruption, computation method of competitors and domestic private investment growth in terms of capital size has coefficient estimates of about 14.5, 3.4, 1.8, 11.3, 15.1, 3.13, 7.4, 2.45, -5.13, -7.09 percents respectively but they were statistically insignificant. The coefficient of business tax, investment incentive, financial constraint, interest rate of loan, infrastructure, firm age, and land access in relation to domestic private investment growth implies that growth of domestic private investment was positively related with business tax, investment incentive, financial constraint, interest rate of loan, infrastructure, firm age, land access, and negatively related with level of corruption and computation method of competitors even though their relation was statistically insignificant. In other words existed business tax, investment incentive, financial constraint, interest rate of loan, infrastructure, firm age, land access,, of the investment has positively determined the domestic private investment growth, but level of corruption, computation method of competitors were negatively determined the domestic private investment growth expansion achievement opportunity and vice versa with statistically insignificant.
In order to analyze the dummy variable, the manufacturing investment was chosen as a base because this sector was given higher priority by the government of the Tigray regional state as well as national government, due to this reason this sector was relatively growing better than the other sectors in the city. Based on this reason the result was provided as shown below.
The relation between agriculture and manufacturing types of domestic private investment growth has coefficient estimates of -16.4 percent it was statistically significant at 5 percent level of significance. The coefficient of agriculture type of domestic private investment growth in relation to manufacturing type of domestic private investment growth implies negative relation. In other words, the agriculture type of domestic private investment was grown 16.4 percent less than manufacturing type of domestic private investment or manufacturing type of domestic private investment was grown 16.4 percent greater than agriculture type of domestic private investment.
The relation between service and manufacturing types of domestic private investment growth has coefficient estimates of about 39.6 percent it was statistically significant at 1 percent level of significance. The coefficient of service type of domestic private investment growth in relation to manufacturing type of domestic private investment growth implies positive relation. In other words, the service type of domestic private investment was grown about 39.6 percent greater than manufacturing type of domestic private investment or manufacturing type of domestic private investment was grown about 39.6 percent less than service type of domestic private investment.
Generally, the result shown in Table 4 above revealed that firm size and market access were negatively and significantly determined the domestic private investment in Mekelle City; but economic condition of the City was positively and significantly determined the domestic private investment in the City. The remaining proposed determinant factors of the domestic private investment which were land access, computation condition, educational level of the owners (managers), tax rate, investment incentive, financial constraint, interest rate of loan, infrastructural access, and firm age were positively and insignificantly determined but firm corruption and computation approach of competitors were shown negative and insignificantly influencing the domestic private investment growth in the City. Moreover, construction and agriculture types of domestic private investments were grown less than manufacturing but service and trade types of domestic private investments were grown better than of manufacturing type of domestic private investment in the City in terms capital size.

TABLE 5: SUMMARY OF HYPOTHESIZED RESULTS AND THEIR STATISTICAL SIGNIFICANCE LEVEL

Variable	Growth in terms of employees size		Significance level	Growth in terms of capital size		Significance level
	Expected sign	Accept (reject)		Expected sign	Accept (reject)	
Tax rate	positive	reject	1%	positive	accept	-
Investment incentives	negative	accept	1%	negative	reject	-
Access to finance	negative	accept	5%	negative	reject	-
Firm size	negative	accept	1%	negative	accept	5%
Interest rate	positive	accept	5%	positive	accept	-
Access to infrastructure	Negative	reject	5%	Negative	reject	-
Corruption	positive	accept	-	positive	reject	-
Firm age	negative	accept	1%	negative	reject	-
Type of investment	Dummy		dummy	Dummy		dummy
Educational level Managers (owners)	negative	reject	-	negative	reject	-
Access to adequate market	negative	reject	10%	negative	accept	5%
Practice of competitors	Neither	positive	-	Neither	positive	-
Access of land	negative	reject	-	negative	reject	-
Economic condition	Neither	positive	10%	Neither	positive	10%
Accept means accepting (supporting) alternative hypothesis and rejecting the null hypothesis Reject in this case means rejecting alternative hypothesis and accepting null hypothesis						

Source: Own survey (2013)

7. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The aim of this study was to identify and analyze the determinant factors for the domestic private investment firm growth by using OLS regression model. The study result was based on the primary cross sectional data of the year 2013 of Mekelle City that was collected by using systematic random sampling techniques. Primary data was collected from 130 domestic private investment firms' operators/owners. The study used annual employment size and annual capita size (for comparison) growth rate (compound) to determine the status of the domestic private investment growth.
The OLS regression results showed that tax rate, domestic private investment incentives, access of finance, interest rate, infrasturacture access, economic condition, firm age, and market access were signfcantly influencing domestic private investment growth measured in terms of employement size. However, firm size, level of corruption, educational level of managers/ owners, practice of competitors, and access of land were insignificant detrminants on the growth of domestic private investment measured in terms of employee's size. Details of each significant variables are summarised as follows:

- The level of existed domestic private investments tax rate, existed domestic private investments incentive, and firm age were negatively influencing the growth level of domestic private investments at 1% level of significance; access to finance was negatively influencing the growth of domestic private investment at 5% level of significance.
- The level of existed domestic private investment borrowing (loan) interest rate at 1%, access of infrastructures at 5%, access of adequate market and economic conditions at 10% levels of significance levels were positively influencing the growth of domestic private investment in terms of employee's size.

In the case of investment type; agriculture, service, and trade types of domestic private investment were grown less than by about 7.69%, 10.42% and 18%, respectively, compared to the manufacturing type of domestic private investment growth measured interms of employment size. Furthermore construction type of domestic private investment was grown by about 3.71% less than that of manufacturing type of domestic private investment measured in terms of employees size.

Moreover, firm size, economic condition and market access were found significant determinant factors while the growth of domestic private investment was measured in terms of capital size. On the contrary tax rate, investment incentives, access of finance, interest rate, infratructure access, firm age, firm size , level of existed corruption, educational level of the owners (managers), practice of competitor and land access were found insignificant determinant factors in the growth of domestic private investment while their growth was measured in terms of capital size.

Investment type was also found to be the significant detrminant factor of domestic private investment in both capital and employees size. When they measured in terms of capital size, agriculture and trade types of domestic private investments were grown by about 16.4%, and 2.45%, respectively, less than that of the manufacturing type of domestic private investment; and service type of domestic private investment was grown by about 39.6 % greater than that of the manufacturing type of domestic private investment. Moreover, construction type of domestic private investment was grown by about 12.40% less than that of the manufacturing type of domestic private investment as they measured in terms of capital size.

Economic condition and market access were found significant determinants of the domestic private investment growth in both employees and capital size even though there was difference in the sign of market access in both emplyee's and capital size growths. In addition level of corruption, edducational level, practice of competitors, and access of land were insignificant determinant factors of the domestic private investment growth in both employee's and capital sizes.

RECOMMENDATIONS

On the basis of the above findings and conclusions, the following recommendations are forwarded in order to realize the domestic private investment growth both interms of employees and capital size. Mekelle investment office in collaboration with the government of Tigray should promote and facilitate growth of domestic private investment via (1) identifying and transparently announcing the potential investment areas in the City, (2) motivational supports such as providing incentives, avoiding corruption in public institutions, smoothing the bureaucratic obstacles at the time of registration as well as other necessary services needed by domestic private investors, (3) providing necessary infrastructural access to the identified potential investment areas, (4) taking appropriate measures on those who are illegally running their investment and motivating the developmental investors, (5) making regular communication with the existed investment firms and discussing on over all issues and problems facing by domestic private investors as well as their solutions and then taking shares of the solutions by the government and investors themselves, and (6) regular follow up of all the identified problems and solutions by the office, investors and government.

The City's investment office has to make strong linkage and collaboration with infrastructure processors such as Ethiopian electric power corporation, telecommunication and communication, Medias, Ethiopian road construction authority and other respective stakeholders to speed up these infrastructural expansions in progress, attract and promote the existed investment opportunities for new domestic private investors as well as solve the problems of infrastructural access for those are in operation.

Financial constraint was negatively influencing the domestic private investment growth in terms of employee's size but the reverse was true for capital size. The labor intensive domestic private investments were facing financial shortage for expansion and growth. So, the respective body should see this gap and solve it in collaboration with the financial institutions such as Banks and Microfinance institutions. The stakeholders should also collaborate with the respective bodies in encouraging the domestic private investment by improving its working and saving culture. If this problem is solved, it will have dual advantage, i.e., (1) solving the problem of domestic private investment growth constraint, and (2) solving unemployment in the City and region. Investment incentives were negatively and significantly determined the growth of domestic private investment growth in terms of employee's size; and positive but insignificant in terms of capital size. This is may be due to inconsistence with the government incentive priorities to motivate domestic private investment. So, the government and investment office should revisit the practical application of incentives given to encourage domestic private investments as compared with the policy of investment and take corrective measures accordingly.

Growth of agriculture type of domestic private investment showed significantly lower as compared with manufacturing type of domestic private investment. So, as long as agriculture is the backbone and leader of the region's economy, the investment office in collaboration with the government should give attention to encouraging urban agriculture investment by identifying preferential areas and promoting the potential investment opportunities in the City; and providing encouraging incentives including making the indentified investment areas conducive in terms of infrastructural facilities in order to easily accessed by potential domestic private investors who are interested in agricultural type of domestic investment**.**

8. LIMITATION AND SUGGESTION FOR FURTHER RESEARCH

- This study used a sample respondents selected from a single City and this may not represent the condition of domestic private investments across the region and generalization at the region level or ccountry level is difficult.
- This study was only applied to domestic private investment growth in Mekelle City, but a valuable finding may come up by taking data from different Zonal Cities in the region.
- This study was mainly focused on domestic private investment firms which were in operation. The domestic private investments which were in pre-implementation and implementations were not included. So, further researcher can be done by including these domestic private investment firms in different stage in order to come up with valuable findings.
- This study used the employee's size to measure the growth and for comparison the capital size. But, if it is studied by using level of saving growth and growth of contribution to GDP, different or similar finding may come up.
- Sector specific investigation is recommended because the determination level of the selected variables may not equally influence for each economic sectors (manufacturing, agriculture, service, construction, and trade types) of the domestic private investment.

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ASSESSING THE STATUS, CHALLENGES, AND OPPORTUNITIES OF PUBLIC-PRIVATE PARTNERSHIP (PPP) IN SOLID WASTE MANAGEMENT (SWM) IN ETHIOPIA: A CASE STUDY ON MEKELLE CITY, TIGRAY

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MEKELLE

ABSTRACT

The objective of this study was to explore the status, challenges, and opportunities of the existing Public-Private Partnership (PPP) in SWM in the Mekelle city. It has employed a qualitative approach; non probability sampling methods particularly purposive and convenience sampling procedures were applied in selecting sample respondents. Primary data was used- it was collected through key informants interview and scheduled semi-structured interviews; and analyzed on logical judgment basis. The existing solid waste management practice in Mekelle City clearly indicated that an Integrated Solid Waste Management (ISWM) model has been in practice, though incomplete, in addressing the challenge of urban solid waste management, such as Private Sector Participation (PSP) with clear contractual agreements; public sector participation (Municipality and Environmental Agency) involving NGOs (UNDP and ULGDP) and Community Based Organizations, and institutional restructuring. Except for not adopting technological innovations, the existing private-public partnership (PPP) in Mekelle City solid waste management is found to be relatively strong. Therefore, the municipality should introduce technological innovations (such as incineration, conversion to bio-gas, refuse derived fuel and composting, precast) to cater the ever increasing solid waste volume and create new opportunities for employment. Finally, further research is suggested on identifying, adapting, and expansion of innovative SWM techniques, considering the ever increasing solid waste volume in response to the Mekelle city expansion and its population growth.

KEYWORDS

Community Involvement, Environmental Education, Public Private Participation, Solid Waste Management, Waste Collection.

1. INTRODUCTION

This study was aiming at assessing the current status, challenges, and opportunities of Public-Private Partnership (PPP) in Solid Waste Management (SWM) in Mekelle City, Tigray- Ethiopia.

Increase in urbanization, population density and income, changing food habits, among others, positively cause rise in solid waste. Solid waste is, thus, an integral part of modern society. Human activities create solid waste. This calls for proper collection, separation, transportation, treatment, and disposal of solid waste. Otherwise, it causes risk to environment and public health.

Rapid urbanization is a dramatic reality in Ethiopia. Small towns are becoming cities and big cities are getting bigger as growing and increasingly mobile populations crowd into urban areas. Grierson and Brown (1999) explained that expanding urban populations, with their ever greater needs and expectations, are fuelling a relentless growth in demand for more and better urban services; services that many municipalities cannot hope to provide in the current climate of stagnant municipal budgets and decreasing external support. The staff, equipment, budgets, and the systems and methodologies needed to service growing cities are not adequately available within the public sector.

Mekelle city is among the fast growing cities in Ethiopia in which cost effective and sustainable SWM is becoming among the key municipal issues. The city is expanding, population is growing, residential areas are concentrated, waste generating businesses are emerging everywhere, food habits are significantly changing, etc. Thus, the role of waste generators and waste managers need to be assessed for developing cost effective and sustainable SWM system and infrastructure on the basis of their partnership.

Solid waste management constitutes one of the most crucial health and environmental problem facing governments in developing countries (Cointreau - Levine, 1994; Zurbrugg et al., 2006). It has been a local government responsibility to provide this service for decades (Pfammatter & Schertenleib, 1996). Government municipalities often oversee the collection, treatment, and disposal of solid waste. They struggle with the problems of high volumes of waste generated; the disposal technologies and costs involved in managing the waste (Furedy 1992; Rotich et al., 2005). While there are a variety of methods to treat and dispose of waste, the optimal waste management system depends on a large number of factors, such as: topography, population density, transportation infrastructures, socioeconomics and environmental regulations (Sakai et al., 1996).

However, they have failed to provide it to a large section of the population (Bolaane & Ali, 2004; Choguill, 1996; Cointreau – Levine, 1994). The main reason for this inability to manage waste is due to rapid population growth coupled with the expansion of cities, diminishing financial resources and poor urban planning (Bolaane & Ali, 2004; Choguill, 1996).

Thus, local government authorities incorporate private firms in delivering solid waste management services. These services encompass waste collection and transfer; disposal; recycling and composting; and in few cases resource (energy) recovery. It is broadly recognized that 'public-private partnership (PPP)' can help meet the growing demand for municipal services. According to Hutchinson (1996), Donaldson and Wagle (1995), and USEPA (1999), PPP is defined as the transfer and control of a good or a service currently provided by the public sector, either in whole or in part, to the private sector. It involves a wide range of private sector participation in public services (as cited in El-Fadel & Massoud, 2002). Grierson and Brown (1999) also explained PPP as municipal authorities working together with private enterprises to fulfill public sector responsibilities for urban municipal services.

Interest in PPP has been increased in Ethiopian municipalities. One of the most obvious manifestations of this reality is that small enterprises are moving in to fill the vacuum left by the public sector capacity. These private enterprises have demonstrated that private sector enterprises have an important role to play in meeting the demand for municipal services.

According to Jefrey (1996), Sabra (1994), Shami (1998), and USEPA (1998), the increased interest in PPP can be attributed to:

1) Improved performance of the public sector by employing innovative operation and maintenance methods,
2) Reduced and stabilized costs of providing services by ensuring that work activities are performed by the most productive and cost effective means,
3) Improved environmental protection by dedicating highly skilled personnel to ensure efficient operation and compliance with environmental requirements, and
4) Access to private capital for infrastructure investment by broadening and deepening the supply of domestic and international capital (as cited in El-Fadel & Massoud, 2002).

Among the major responsibilities of a municipal administration is solid waste management. The solid waste is rising in almost all cities and towns for solid waste are an integral part of modern society. Rode (2011) reported that such rise is observed because of increase in urbanization, population density and income, changing food habits, taste and pattern. The growth of industry, commercial units such as hotels, theatres, restaurants, supermarkets are rising fast. Such units are positively contributing to the solid waste generation.

In the same way, the growth in the local economy has led to the rapid expansion of Mekelle city and its population. The increasing population and development has produced increasing volumes of waste to be managed. This rapid growth in population has added unmatched burdens to the municipal systems collecting and disposing of solid wastes.

Prior to 1991, there was hardly any problem of solid waste management in Mekelle City. The solid waste was locally managed. Almost all the wastes were organic in nature and were used as manure. The wastes collected were dumped on nearby river banks or in open fields. In those days, the flow of water in nearby rivers was capable in degrading the dumped organic wastes which were small in quantity. But these traditional practices could not continue due to the increasing population densities. Increase in population density has lead to the increase in the volume of waste. This has created a massive threat to public health due to the lack of proper solid waste management.

Among the burdens is increasing cost of municipal solid waste management (SWM). The increasing cost of municipal SWM has led Mekelle city administrators to examine if this service is best provided by the public sector or can better be provided by the private sector. Public-private partnership (PPP) has emerged as a promising alternative to improve SWM performance. As a result, the SWM has been partially privatized, where private entrepreneurs are engaged in the collection and disposal of solid waste. In 1995, Bartone described that solid waste collection and processing is one area where there is clear evidence both of the benefits of private sector participation and of the need for closer cooperation between municipal authorities and private entrepreneurs (as cited in Grierson & Brown, 1999).

After the mid-1990s initiation started by the Mekelle city municipality to diagnose the problem and some short-term as well as long term suggestions were set. These suggestions were basically meant for the smooth functioning of the Solid Waste Management and quick collection and disposal of the waste. Thus, this study will assess the experience encountered to date with private sector participation in SWM in the Mekelle city. In addition, the public perception about solid waste collection services rendered was examined.

2. RELATED LITERATURE REVIEW

This section addresses the theoretical review and the empirical evidences on PPP in solid waste management challenges and opportunities.

2.1. THEORETICAL REVIEW

The formation of a public-private partnership on the community level, public-community based partnership (Franceys & Weitz, 2003), provides better services because it works more directly with the involved stakeholders (Baud et al., 2001). The development of SWM through the public-community partnership is seen as a way to improve the SWM system.

While opinions vary on the exact conditions necessary to facilitate successful PPPs, general consensus exists on a number of criteria. In the United States, the National Council for Public-Private Partnerships identifies the following as critical to success (National Council for Public-Private Partnerships, 2010):
1) Top leadership must be committed and actively involved in developing the partnership. Regulatory framework must also be in place to facilitate implementation of the project.
2) Public sector must be involved in monitoring the partnership's performance to ensure continued success.
3) Clearly laying out expectations ahead of time ensures a higher rate of success. The contract must outline the responsibilities of each party and a process for dispute resolution.
4) There must be a method of repayment for the private investor (tariffs, tolls, etc.).
5) Open communication is critical to securing support of various constituencies and ensuring the partnership's success.

Moreover, the following criteria were identified as conditions specific to waste management in Vietnam, to overlap significantly with those priorities highlighted above by the National Council for PPPs (SS URENCO, 2009):
1) Both parties must share responsibilities in managing the project.
2) Cost recovery for the investor as well as flexibility in the tariff schedule must exist.
3) Minimal time should be spent on bureaucratic procedures and little tolerance allowed for corruption and incompetence.
4) Achieving government consensus on the current regulatory framework.
5) Adequate infrastructure is critical to attracting investors.
6) Attracting foreign investment and ensuring the success of PPPs requires a stable and reliable workforce. Retaining well-educated and well-trained individuals continue to be a significant challenge.

In sum, generation of solid waste is increasing rapidly due to the combined impact of population growth and improving living standards. As people of all income levels consume more, there is an increased demand for waste management infrastructure projects and need to address public health concerns.

Solid waste management is a non-excludable good as it is difficult to be protected by the general market forces. One way of managing non-excludable goods or services is either by the internalization of costs (by levying charges for the use of the services) or by following a command and control policy or a combination of both. Government intervention is necessary for this. But, PPPs has been found a solution to cater urban solid waste management.

Therefore, by providing an avenue for private sector involvement, PPPs help promote stronger systems through management efficiencies, advanced technologies, cash flow management, workplace efficiencies, shared resources, shared capital, and personnel development. A strong PPP capitalizes on the strengths of both private and public sector to reduce development risk, provide better and more cost-effective public service, and speed up the rate of implementation or coverage.

2.2. EMPIRICAL EVIDENCES

The definition of partnership has evolved from a matter of simple coordination and coalition to more participatory terms such as mutual collaboration, common goal and shared responsibility (Haque, 2004). PPPs:
- Offer promise of better success when the strength of more than one player is required (Rosenau, 1999).
- Considered to be flexible and dynamic holding the promise of possible compromise in the form of constructive collaboration (Nkya, 2006).
- Ensure private sectors are better at performing economic tasks, innovating and replicating successful experiments, adapting to rapid change, abandoning unsuccessful or obsolete activities and performing complex or technical tasks (Rosenau, 1999).
- Increase the responsiveness of policies and create accountability to new stakeholder group by including them into policy-making process (Steets, 2004).

According to Adarsh (1996), in addition to the traditional practice where Municipal Authorities assume the responsibility of urban waste management, the following innovative urban waste management activities are being practiced in India:
- Ensuring **people's participation** in the collection, segregation and disposal of garbage by forming clubs or community based organizations.
- Encouraging the **involvement of NGOs** in working on various environmental programs and areas related to urban SWM, including educating the public about the importance of better waste management.

- Developing public-private partnerships leading to the **privatization** of some aspects of garbage collection, recovery and disposal.
- Applying **technological innovations** for effecting improved recovery and disposal of waste. Some of the known technologies observed are incineration, conversion to bio-gas, refuse derived fuel and composting.
- Initiating provisions aimed at **administrative restructuring** of the urban local bodies (Municipalities) to enable them to discharge their specific responsibilities more efficiently.

Cointreau – Lavine (1994) has identified the following broad forms of Public Private Partnerships in SWM:

- **Contracting**- government awards a finite-term contract to a private firm for the delivery of solid waste collection service, street sweeping service, collection of recyclables, transfer station operation or disposal site maintenance. The private firm is paid for service delivery by the government under the terms of the contract.
- **Concession**- government awards an agreement or license to a private firm to set up a facility that utilizes the government - owned resource refuse. This concession may enable the private firm to recycle materials (paper, plastic, metal, glass) from refuse; to recover resources (compost, heat, electricity) from refuse; or to transfer or dispose of refuse. The concession is in the form of a long-term contractual agreement, whereby the private firm builds the facility.
- **Franchise**- government awards a finite-term zonal monopoly (a franchise) to a private firm for the delivery of solid waste collection service. The private firm recovers its cost and profit through direct charges to the households and establishments that are served. The company incurs the costs of billing including costs of nonpayment and late payments by community.
- **Open competition methods-** government freely allows qualified private firms to compete for refuse collection, recycling, or disposal services. Individual households and establishments make private arrangements with individual firms for refuse collection and recycling. No firm holds a zonal monopoly, and any number of firms may compete within the same zone. Costs are directly billed by the private firms to their customers.

Private Sector Participation (PSP) in waste management has been introduced in Nepal. In most cases, the involvement of private sector has been in the form of management contracts where a private contractor is given the responsibility of collecting waste from a certain area for a fixed fee. There are two PSP systems commonly practiced by municipalities in Nepal (SWMRMC, 2004):

- **Franchise system-** a private company is given the responsibility to collect waste as well as service fee from waste generators in a designated area. This form of PSP usually results in less cost for the municipality and the service provider becomes more accountable to the people.
- **Concession system-** a private sector invests in waste management related facilities such as compost plants and operates it for a certain time.

As waste is generated by the people, their participation is essential to ensure a well managed solid waste management system. Municipalities have realized this fact and initiated programs to educate local communities and involve them in waste management, including the following (SWMRMC, 2004):

- **Children and Environment***:* establishing nature clubs, building capacity of club members and organizing various activities within the school and surrounding community.
- **City Volunteer:** work as a link between the municipality and the community to promote household composting and recycling and community involvement in keeping their neighborhood clean.
- **Community Participation and Training:** working with community groups and provides them technical and financial assistance where necessary; also form and support Ward Environment Committees in several wards.
- **Demonstration of Environmental Technologies:** promoting technologies such as compost bins and vermi compost kits.
- **Community Recycling Centers**: encourage and assist people in recycling their waste.
- **Mass Education**: reaching out to the general public through radio programs, message boards and regular exhibitions.

According to Puorideme (2010), the emerging conditions that appear to have hindered the practice of an Integrated Solid Waste Management (ISWM) are:

- Limited collaboration between the Municipal Assembly and the public and private sectors.
- Lack of clear contractual arrangements for Private Sector Participants (PSP).
- Lack of public sector participation involving environmental Non-Governmental Organizations and Community Based Organizations.
- Lack of recognition of informal sector participation involving scavengers and itinerant wastes buyers.
- Lack of community mobilization units under the waste management departments.
- Lack of technological innovations for urban solid waste management.

Many other researchers have also reported the following barriers to PPPs in SWM:

- Attitudinal barriers to public private partnerships (JICA, 1997; Kettl, 1993; Medina, 2000; Schubeler, 1996).
- Institutional barriers to public private partnerships (Pets, 2004).
- Political barriers to public private partnerships (El- Fadel & Massoud, 2002; Schubeler, 1996).

There has been an important increase in the use of public private partnerships. PPPs represent the joint effort of a government and private entity to provide goods and services. With regard to waste management projects, PPPs can (Massman, 2007):

- Create a larger infrastructure for managing waste than could otherwise be achieved through public funding;
- Strengthen infrastructure with guaranteed services;
- Provide more taxpayer value;
- Stimulate innovations that typically occur in a commercial market; and,
- Optimize the quality of infrastructure and personnel by combining skills and assets of both public and private sectors.

Besides, Massman (2007) summarized the reasons for implementing PPPs as follows:

- To provide additional capital;
- To provide better management and implementation skills;
- To provide more added value; and
- To more efficiently allocate risks, thus improving the identification of needs and the optimal use of resources over the whole life of a project.

According to Puorideme (2010), the potential advantages of PPPs over traditional public procurement procedures are acceleration of infrastructure provision, faster implementation, reduced whole life costs, better risk allocation, better incentives to perform, improved quality of service, generation of additional revenues, and enhanced public management.

Local government authorities incorporate private firms in delivering solid waste management services. These services encompass waste collection and transfer; disposal; recycling and composting; and in few cases resource (energy) recovery.

The operational options for primary waste collection in developing countries are observed to be (Cointreau – Levine, 1994; ILO, 1997) door-to-door collection system, communal storage or bring system, and house to house collection with trucks. Wilson et al. (2006) have also reported that the common methods of waste disposal in developing countries are observed to be open dumping, burying and burning of waste in open spaces, sanitary landfill, recycling, and composting.

Adverse environmental impacts from improper solid waste management are rooted in inadequate collection, recovery of recyclable and disposal of wastes. These impacts are also due to inappropriate location, design, operation, or maintenance of dumps and landfills. Improper waste management activities are associated with the following environmental impacts:

- Threats to public health (EGSSAA, 2006; Johannessen et al., 1999; Muttamara & Leong, 1997):
- Surface and groundwater pollution (EGSSAA, 2006; Muttamara & Leong, 1997).
- Air and atmospheric pollution (EGSSAA, 2006; El - Fidel et al., 1997; Muttamara & Leong, 1997)
- Ecosystems damage (Beede & Bloom, 1995; EGSSAA, 2006).

Besides, SS URENCO (2009), in its study in Vietnam, reported that the challenges of SWM were landfill capacity constraints; landfill hazards; separation and recycling; financial management; lack of sufficient human and technology capital; and capacity, training, and public awareness challenges.

3. PROBLEM OF STATEMENT

Solid waste management (SWM) is an important environmental health service and is an integral part of basic urban services. Disposal became problematic with the rise of towns and cities where large numbers of people started to congregate in relatively small areas in pursuit of livelihoods. On the one hand, the density of population increased in these centers of congregation and, therefore, wastes generated per unit area also increased. On the other hand, available land for disposal of waste decreased in proportion. SWM thus emerged as an essential, specialized sector for keeping cities healthy and making them a place to live (Bolaane & Ali, 2004; Choguill, 1996; Furedy, 1992; Grierson & Brown, 1999; Pfammatter & Schertenleib, 1996).

The challenges of the SWM sector are continuing to grow with the growing urbanization. Urbanization has become a worldwide trend, and is particularly rapid in the developing world. In tandem with the growing urban population, the production of solid waste is also increasing. It is clear that SWM in future will expand in scope and complexity. It will also consume a considerable proportion of city budgets. The SWM sector, thus, deserves careful attention for striking a balance between quality of service and cost effectiveness. This challenge is particularly significant for developing cities, like Mekelle city, where resources are limited but urbanization is occurring rapidly.

For that reason, there is an emerging trend in encouraging the private sector to enter into solid waste management (SWM) operations, and attempts are being made to formally link the public and private sector operators. Such linkages may improve the efficiency of the entire sector and create new opportunities for employment. Effective, efficient, and sustainable solid waste management is compelling for the ever growing Mekelle city. **It is, thus, worth assessing the current status, challenges, and opportunities of Public-Private Partnership (PPP) in SWM in the Mekelle city.**

4. OBJECTIVES

4.1. GENERAL OBJECTIVES

The study was assessing the status, challenges, and opportunities of the existing Public-Private Partnership (PPP) in SWM in the Mekelle city; and the public perception about solid waste collection services rendered was examined by using logical qualitative judgment.

4.2. SPECIFIC OBJECTIVES

The study had the following specific objectives:

1) To examine existing status of SWM system,
2) To assess how solid waste generators manage the solid waste,
3) To ascertain how solid waste managers manage the solid waste, and
4) To examine public perception on solid waste collection services.

5. METHODOLOGY

5.1. RESEARCH DESIGN

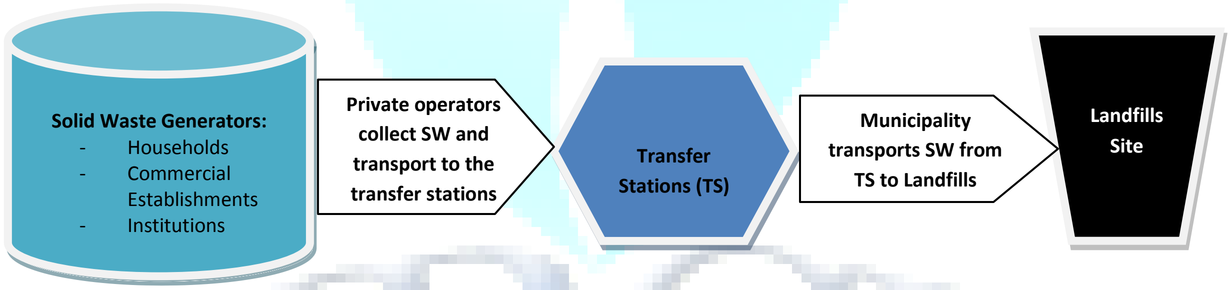
The study was employing a qualitative approach given the nature of the study. It was exercising a participatory approach. It offered solid waste generators (i.e., households, hospitals, universities, hotels, etc) and solid waste managers (i.e., municipality and private firms) the opportunity to participate in searching and examining the solid waste management challenges and opportunities. Moreover, it gave the researchers the opportunity to be involved in the issue of solid waste management in Mekelle city, to get a better understanding from the actors' point of view.

This study was assessing the status, challenges, and opportunities of PPP in SWM in the Mekelle city. In addition, the public perception about solid waste collection services rendered was examined. It was carried out in Mekelle city. Mekelle is the largest and relatively highly urbanized city in Tigray. It is, thus, believed that Mekelle city is feasible for assessing the PPP in SWM. Moreover, the study was confined only to the SWM portion of the Mekelle municipality service.

5.2. CONCEPTUAL FRAMEWORK

This study has tried to examine the status, opportunities, and challenges of Public-Private Partnerships (PPPs) in Solid Waste Management (SWM) in Mekelle city. The interaction among the public (municipality), private business, and community in SWM was examined by considering the following conceptual framework.

FIGURE 1: SWM CYCLE IN MEKELLE CITY



Source: Own design (2013)

5.3. DATA TYPE, SOURCE, COLLECTION, AND ANALYSIS TECHNIQUES

Primary data was used. It was collected from both the waste managers and waste generators by using scheduled semi-structured interviews. Finally, the data was analyzed on logical judgment basis.

5.4. SAMPLING TECHNIQUE

Non probability sampling methods particularly purposive and convenience sampling procedures were applied in selecting the waste generators and waste managers, respectively, for data collection. 70 households (10 each from seven local administrations), Milano Hotel (1), Axum Hotel (1), Mekelle Hospital (2), and Mekelle University (2) were selected from the waste generators on convenience basis; and 10 key informants were selected from the waste managers on purposive basis. Moreover, commercial establishments (such as super-markets, mini-markets, cafeterias, pubs, coffee houses, bars, tailors, beauty salons, and barbers), other than above, were randomly consulted on the existing SWM in the Mekelle city.

6. RESULTS AND DISCUSSIONS

The description of the study area provided evidence that population is growing quite rapidly as a result of the social and economic development opportunities that have been introduced during the last two decades. Population increase has significant influence on the quantity of solid waste generated and its proper handling in the municipality. The population of Mekelle City is rapidly increasing as a result of its rapid urbanization. However, this population growth has not been accompanied with increase in the municipal solid waste management infrastructure. The implication of this growth is large quantities of solid waste generation and increased pressure on solid waste management infrastructure as a result of the increasing solid waste generated daily. In view of this, the existing solid waste management in Mekelle City is analyzed in this section.

6.1. SOLID WASTE STREAM IN MEKELLE CITY

Solid wastes generated in Mekelle City can be classified under organic waste (i.e., grass, paper, fruits and vegetables, food scraps, leaves and wood, inert waste such as ash and sand, dead animals, etc) and inorganic waste (i.e., plastics, metals, glasses, clothes, bones, and batteries). The major sources of solid waste generators include residential, institutional and commercial establishments. Households and hotels generate large quantities of organic, bone, and plastic wastes while university generates greater quantities of organic and plastic wastes. Other commercial establishments generate organic, plastic, metal, batteries, glasses, and clothes. According to the Mekelle City Municipality, significant amount of solid waste generated is organic. Most of the workshops by-products (metals) are reused for further production.

The high proportion of plastic waste is as a result of the fact that plastic bags and containers have become the most dominant packaging material for most of the items (including water) bought from open markets, supermarkets and restaurants. Inert waste including sand and ash from households and construction works also constitute the greater proportion of solid waste since most households depend largely on coal and fire wood as source of energy for cooking, backing, and brewing. Apart from the households, the rapid increases in hotels, restaurants and bar operations have contributed to the high levels of organic waste generation. Hospitals generate greater quantities of organic and plastic wastes. Besides, according to the Municipality, much of the solid waste from hospitals are hazardous and these institutions are expected to manage these waste by themselves in a manner that ensures public safety and for that matter do not form part of the classifications above. The management of hazardous waste by the hospitals is not discussed for the respondents were not voluntary to share "how" they manage it.

6.2. EXISTING SOLID WASTE MANAGEMENT ARRANGEMENT

The Mekelle Municipality has the primary responsibility of managing the solid waste generated in the municipality. It performs a range of services in solid waste management including collection, transportation and disposal. As a result of logistics and financial constraints, three private operators (Diliet, Fana, and Superdan) have been contracted by the municipality to collect solid wastes from the households, hospitals, hotels, university, restaurants, shops, etc and transport to the transfer stations. Moreover, micro enterprises were also organized and have sub-contract from the private operators to collect solid wastes from the streets only by using carts and load to the mini- transfer station as well as private operators' cars.

There are four transfer stations in Mekelle city: Dejen, Mayduba, Meskerem Hospital, and Quiha. Transportation from these transfer stations to the landfill (disposal) site is managed by the municipality itself. Sometimes, the private operators were instructed to directly transport the solid waste to the landfill site when the transfer station is fully occupied, on fee basis.

Households pay Br.6/annum to the municipality attached to their annual land rent; commercial establishments pay Br.24/annum to the municipality attached to their annual land rent; but government organizations, except Mekelle University, are free. The payment for services carried out by these private operators for households, government organizations, and commercial establishments is done by the Mekelle municipality on contract basis (Br. 27/M^3 plus 15% of the total payable amount; Br. 541.97 per month per transfer station for health safety; Br.11, 476 per month for office employees; Br. 50 per dead donkey and horse; Br. 50 per sewerage hole (manhole) if clearing is conducted beyond their agreement, for their agreement is sewerage clearing 3 times per year). The private operators should pick solid waste 12 times per month from the households, government organizations, and commercial establishments. Beyond this, the solid waste generator pays directly additional service fees to the private operators ranged from Br. 153 to Br. 500 per month, excluding VAT.

The Mekelle Municipality supervises the private operators at the municipal level. The private operators also reports monthly to the municipality. The municipality has been successful in involving the private sector in solid waste management, which was carefully monitored and evaluated. However, the private operators appeared not accountable to the households. For example, the households complained that they picked up not more than twice a week, i.e., less than 8 times per month. Similar complaints are also reported from hotels.

The payment for street waste collection by the micro enterprises is done by the private operators on sub-contract basis, i.e., Br. 37,000 per month. On the other hand, the payment for services rendered by the private operators to Mekelle University is managed by the client on contract basis. The private operators were carefully monitored and appeared accountable to their clients.

6.2.1. SOLID WASTE STORAGE AND COLLECTION

The private operators were responsible for collecting solid waste from households, hospitals, hotels, and university. They practice door-to-door solid waste collection. There are no communal solid waste containers where waste generators dump their waste for it to be collected by waste service providers. Rather, the solid waste generators have their own containers such as waste bins, plastic and metal barrels, etc. The municipality also placed dust bins along the major streets for storing waste for collection. Waste generators do not pay user fees for such collection system. The frequency of collection of solid waste by private operators for transfer stations is twelve (12) times per month and from the transfer station to the final landfill (disposal) site by the municipality is on daily basis. But, the system is characterized by absence of communal solid waste containers in the residential areas. As a result, the residential areas are full of different solid wastes dumped here and there.

Only private operators practice households' door-to-door and office collection of solid waste in Mekelle City; however, micro enterprises are confined only to the street solid waste collection. Households and offices are encouraged to apply plastic waste container according to their preference where solid waste is stored for collection. Waste is moved straight from the source to a collection vehicle at a given time.

The study revealed that there was written contractual agreements between the private operators and the municipality; the private operators and the micro enterprises; and the private operators and Mekelle University. Thus, when and how services were rendered to the beneficiaries was the discretion of the municipality and the Mekelle University. However, the private operators are not accountable to households for the door-to-door services.

6.2.2. SOLID WASTE DISPOSAL

There are four transfer stations in Mekelle City where the private operators dump the collected solid waste from trucks in to the solid waste containers. The current municipal solid waste landfill site is open space, but fenced, located 6.5 kilometers away from Mekelle city. The municipality trucks picked up the waste containers from the transfer stations to the landfill site in Adi-Qolomay which is to the west of Adiha, i.e., located in western Mekelle. The disposal method at present is controlled landfill. Separation is arranged to be 60% at the solid waste generator, 30% at the transfer station, and 10% at the landfill site. MSEs waste pickers are allowed access to landfill (disposal) site for separating the organic and inorganic solid waste for Br. 42 per a municipality car, i.e., one container.

The solid wastes separated by the MSEs in the landfill site are composed of organic and nonorganic. Only the organic solid waste is being dumped on the landfill site, where the organic waste is spread in to layers; ground landfill is compacted in order to reduce its volume; and covered by soil in order to treat exposure to wind and facilitate composting, fire, wild animals (like hyena) and leachate pond is constructed in order to treat exposure to leachate.

The ground landfill forms like a plateau (mountain). The solution, however, towards disposing this composted organic waste is undefined. The non organic wastes are different plastics, glasses, and bones. The researchers did not find separated metals during their site observation. The site administrator also confirmed that the metals are being properly separated by the waste generators and at the transfer stations, for they have an immediate market. On the other hand, the nonorganic wastes have been accumulated in the field unsafely exposed for manmade and natural fire**.** An interview with the site administrator revealed that it is not known how to dispose the separated and accumulated nonorganic wastes. They are separated and accumulated on daily basis expecting there will be a solution in the future. However, it demands an immediate solution.

Besides to the danger it has being on the field, there was repeated fire broke during the last winter (i.e., mid of this year 2005 E.C.) burning the different plastics; threatening the locals. The researchers also observed that there is still smoke emission inside the burned nonorganic wastes which is prone for future fire.

The management of the landfill site is the sole responsibility of the municipality. The private operators do not contribute to the management of the landfill site. Source separation of organic and inorganic solid waste has been in practice. It is separated in to organic and inorganic mainly at source, i.e., by the solid waste generators; and by the private operators, and at the landfill site.

Building the capacity of community members to engage in safe composting by using organic solid waste could contribute to solid waste management in terms of solid waste reduction. Significant volumes of organic solid wastes (such as soil, grass, leaves, wood, scrubs of fruits, vegetables, food, etc) are disposed by the waste generators that could be easily used for rehabilitating their surrounding land fertility through composting. But, the Mekelle municipality has not been able to come up with composting technology.

Accountability lacks on unapproved solid waste disposal around the residential areas. Waste generators have employed various means of solid waste disposal that have not been approved by the municipality (i.e., open air burning, disposal on the street as well as dumping in the open). It was observed that solid wastes from households were disposed indiscriminately especially around uncompleted buildings and flat lands. The study also indicated that some residents disposed off their solid waste into drains or openly burnt their waste.

According to the municipality officials of the Mekelle City, measures have been put in place such as public education to bring the situation under control. It was observed, however, that the public education efforts of these service providers were not matched with sufficient waste infrastructure provision. It appears that public education programs on solid waste management were ineffective and unsustainable for addressing the issue of unapproved and indiscriminate open dumping of waste. Open dumping is prohibited but there were no communal waste container available for waste storage and collection. This implies that open dumping and open air burning of waste would continue regardless of the warning signs until such time that communal containers are provided for waste storage and collection.

6.2.3. RECYCLING AND COMPOSTING

The study revealed that even though organic solid waste and recyclable solid waste were generated in Mekelle City, the municipality as well as the private operators did not engage in any recycling and composting activity. According to the service providers, they do not have recycling and composting technologies to engage in any recycling activities.

6.2.4. OUTCOME OF THE SOLID WASTE MANAGEMENT SYSTEM

The existing solid waste management system has several repercussions for Mekelle City as a growing town. The study revealed that solid waste management practices that emphasize on collection, transportation and final disposal has been ineffective. The system has limited potential for creating jobs and other economic opportunities since recycling and composting technologies do not form part of the existing solid waste management system, for waste is wealth.

6.3. WASTE GENERATORS AND MANAGEMENT OF SOLID WASTE IN MEKELLE CITY

There are three broad categories of waste generators in Mekelle City. These include residential, commercial and institutional waste generators. In this study, households were classified under residential waste generators; Hotels were also classified under commercial waste generators while university and hospitals were classified under institutional waste generators. This section of the study provides insight into how these major waste generators manage the waste they generate.

6.3.1. SOLID WASTE MANAGEMENT IN HOUSEHOLDS

The study revealed that the households were involved in solid waste management activities including temporal storage, disposal, and reuse.

TEMPORAL STORAGE AND DISPOSAL

Households in Mekelle City have their own containers for storing the solid waste they generate. These containers were not uniform in size and type. However, the common characteristic of all the containers used by the households for waste storage were waste materials such as plastic, barrels, and cartons. The study also observed that the households were willing to participate in solid waste management but the municipality lacked the capacity to provide a standard storage sizes. Households empty their containers at most 2 times a week into the private operator trucks roaming for removal by solid waste service providers. However, the sizes of the household waste containers pose a challenge to the safe storage and disposal of household solid waste. The containers are often filled up before schedule and it contributes to indiscriminate open dumping since households had no communal waste container.

REUSE

Households reuse some of the waste they generate. Waste reuse is considered one of the very effective methods of solid waste management in recent time. Reuse is a simpler process involving reutilization of material in its end used form without the necessity of reprocessing, i.e., bottles and plastics are reused for packaging, such as oil, fuel, powder, etc, and plantation, such as flower and vegetables.

The plastic waste that was reused includes used polythene bags and plastic containers such as buckets. These materials were often sorted or picked from the household solid waste stream. The study revealed that the reused materials were not durable enough and as a result they were discarded as waste within a very short time after reuse. Even though households reused organic waste, they did not prepare compost. They often leave them in their backyard gardens to decompose and serve as manure.

6.3.2. SOLID WASTE MANAGEMENT IN COMMERCIAL AREAS

Solid waste management in the commercial area has been the responsibility of both the firms (i.e., commercial firms collect and separates their solid waste until picked by the private operators) and the private operators pick the collected and separated solid wastes 12 times a month. On the other hand, the private operators sub-contract to the micro enterprises who sweep the streets on a daily basis.

6.3.3. SOLID WASTE MANAGEMENT IN MEKELLE UNIVERSITY

The study revealed that the major types of solid waste generated comprises paper, plant and plastic wastes and the Mekelle University is responsible for managing the waste it generates under contractual agreement with private operators. But, it does not have any technology for recycling solid waste. The study also revealed that the private operators provided containers for waste storage and collection. It is not allowed to dump solid waste indiscriminately around or near the university premises.

6.3.4. SOLID WASTE MANAGEMENT IN HOSPITAL

The hospitals generate both hazardous and non hazardous solid waste. The hospitals are expected to manage their waste under contractual agreement with private operators. Solid waste is generated from various sources within the hospital. These sources included the wards and the hospital surroundings. The technologies used for the management of waste from these sources differ. Containers are provided by the private operators for the temporal storage and collection of waste from the surroundings of the hospital and wards excluding injection syringe. The injection needles are separated and burned in an incinerator constructed by the hospital. Hazardous waste such as human body parts are buried in a specially designed covered pits.

7. CONCLUSIONS

The analysis of data from the field revealed that the Mekelle City municipality has tried to adopt the Integrated Solid Waste Management (ISWM) model which has been proven to be the most preferred model for managing solid waste in urban centers of developing countries, except for introducing composting and recycling technologies.

The existing solid waste management revealed active stakeholder participation, involvement of NGOs and Community Based Organizations in solid waste management. The private and public sectors have been playing key roles in the solid waste management process.

However, the inability of the waste generators to efficiently manage the waste generated (i.e., did not minimize the solid waste by at least separating the organic wastes and composting; avoiding open waste disposal, etc) poses serious problem for the efficiency of the existing solid waste management practice and its sustainability.

The study revealed that existing solid waste management practices in Mekelle City was inefficient and unsustainable for managing the increasing volumes of solid waste. The current solid waste management practices in Mekelle City put emphasis on waste collection and disposal without recovery, recycling and reuse. Thus, the current system cannot cope with the increasing volumes of solid waste generated daily.

The study also revealed that waste generators did not have the capacity in terms of appropriate technologies to manage the waste they generated. Households lacked the standard containers for separating, collecting, storing and moving solid wastes to trucks. Household composting of organic waste was not in practice, and open and street dumping was the norm. Hospitals did not have appropriate technologies for adequately managing hazardous waste except for a small incinerator for burning injection syringes and a pit for burying human parts.

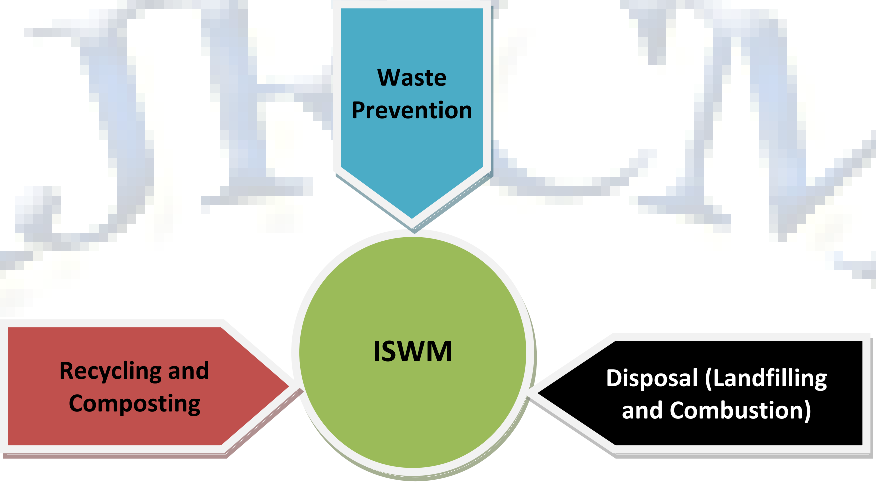
Moreover, the study revealed that the landfill site lacks fire truck; the workers separating waste at the transfer station and landfill site lack standard safety devices; waste generators lack standardized waste containers, composting technologies, and communal waste containers; and there is no clearly stated remedy for the organic as well as inorganic wastes mount up at the landfill site.

Therefore, in order to strengthen and sustain best practices of ISWM in Mekelle City:

- Special attention is required:
- ✓ For the annual sanitary payment made by the households and commercial establishments. The volume of solid waste generation is positively correlated with the level of income earned. However, the annual sanitary fee charged by the municipality among the households as well as among the commercial establishments is same; i.e., not based on the assessed amount of waste generated.

- ✓ On standardizing the solid waste containers and solid waste collection materials used at household, commercial establishments, and other offices. As can be seen from the above pictures (Photo 1 & 3) they are not standardized as a result they may breed bacteria, mosquito, etc. cause danger to household health; filled with short period of time causing spread here and there by wind, dogs, cats, rats, birds, pigs etc.; and cause inconvenience and result in physical damage for collectors while loading on cars and cart.
- ✓ For safety devices. As can be seen at the transfer station as well as the land fill separation (Photo 6-7), the workers lack standardized safety devices such as a devise that covers their neck-up part of their body. They are easily exposed to physical and health damages. Moreover, there has not been fire truck or any device to fight fire at the landfill site.
- ✓ For recycling and composting. However, the municipality has been looking for potential investors to come instead of taking the lead to introduce composting technologies at waste generators level and taking the risk to engage in recycling inorganic wastes with the intention to privatize it sometime in the future.
- ▪ The municipality should set standards for containers as well as safety rules in order to pledge those engaged in solid waste collection, separation, and emptying waste containers; and reconsider the set annual sanitary fee by taking into account the magnitude of waste generators' waste generation capacity.
- ▪ Provide local community with communal solid waste containers in order to mitigate open dumping and disposal. cap
- ▪ There is the need for continuous efficient collaboration between the municipal authority and the private sector, i.e., involving participation from the private sector in order to establish a solid-waste management partnership. Thus, the municipal authority should put in place mechanisms such as stakeholders forum, performance review meetings to facilitate the process of data and information sharing on solid waste management among the parties responsible for solid waste management. This is essential for experience sharing and avoidance of duplication of efforts.
- ✓ A collaborative effort is required by the stakeholders such as Mekelle University, Bureau of Agriculture, Agricultural Research Bureau, EFFORT, Environmental Agency, Municipality, and NGOs to seek an immediate solution for the treatment of the nonorganic and organic wastes amass at the landfill site.
- ✓ The landfill site should be equipped by a permanent fire truck along with a trained staff in fireguard, environmentalist, and sanitarian.
- ✓ Additional MSEs should be encouraged to engage in separating solid wastes at the landfill site.
- ▪ The households are expected to be empowered, i.e., to evaluate the performance of the private operators. This is necessary to strengthen the bond of collaboration between parties (households, private sector and municipal authority) and make private sector accountable to the households at the local level and vice versa.
- ▪ Introduce a concession system (in addition to the existing franchise and contract system) for the private operator would be expected to invest in waste management related facilities such as compost plants and operate them for a certain time.
- ▪ The municipality should formulate comprehensive solid waste management plans and solicit for funding from donor agencies that show interest in environmental issues to form and facilitate the operations of Community Based Organizations (CBOs) in solid waste management, i.e., secure or establish stable financing and ensure funds are used appropriately.
- ▪ The municipality can assist CBOs to develop proposals and source for funding from the World Bank and other NGOs to implement solid waste management programmes that contribute to efficient and sustainable solid waste management.
- ▪ The private informal sector (such as itinerant waste buyers) needs to be organized into associations and groups so that programs can be designed to build their capacities and also assist them with protective equipment to efficiently participate in the solid waste management process.
- ✓ Through the formation of co-operative societies or micro-enterprises, it is often possible to considerably increase the job stability and earnings of such informal sector workers and to enhance the effectiveness of their contribution to waste management.
- ✓ The programs should be designed in a way that fosters collaboration between the private formal and informal sectors.
- ✓ The regional government, municipal authorities and donor agencies should coordinate efforts aimed at promoting the growth of the informal sector in solid waste management.
- ▪ A unit should be created within the waste management department to be responsible for engaging civil society organizations in urban solid waste management, i.e., involve the community in waste-management decision making. This unit should be responsible for working with various community groups, youth groups and school children to raise awareness and provide training and necessary support for effective solid waste management.
- ▪ Capacity-building measures are required because many officers in charge of solid waste management, particularly at the local level, have little or no technical background or training in engineering or management. Thus, the municipality should build capacity of administrative and technical staff in government, NGOs and/or the private sector
- ▪ The municipal authority need to formulate strategies and implement technological innovations necessary for effecting improved separation at source, resource recovery, recycling and disposal of solid waste. Some of the technologies that are in practice abroad, such as incineration, conversion to bio-gas, refuse derived fuel and composting, can be adopted.
- ▪ The municipal authority need to adapt an integrated solid waste management system that takes into account key factors affecting waste generation, storage, and final disposition as recommended by the United States Environmental Protection Agency (USEPA).

FIGURE 2: INTEGRATED SOLID WASTE MANAGEMENT



Source: Adapted from USEPA (2002)

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IMPACT OF INCENTIVES ON JOB-SATISFACTION IN CHENNAI-BASED SMALL MANUFACTURING UNITS

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ABSTRACT
Incentives are a powerful motivator among employees and they induce the human capital towards performing their organisational activities. Job satisfaction is the positive feeling of the employees about their jobs. Employees level of job satisfaction enhances when their jobs provide opportunity for exhibiting their talents, support them in their career development, provides them adequate job security, when they are allowed to participate in managerial decision-making and when there is adequate freedom and flexibility in performing their official tasks. Employers provide monetary incentives and non-monetary incentives. Monetary incentives are of two kinds - individual incentives and group incentives. Individual incentives can be time-based and output-based while group incentives can be profit sharing and group bonus. This study attempts to understand the impact of incentives on job satisfaction and to what extent incentives influence employee-job satisfaction

KEYWORDS
group bonus, job-position, job security, monetary incentives, and profit sharing.

INTRODUCTION
Incentives are one technique by which employers carry out their end of the employment contract—i.e., compensating employees for their efforts. In its most generic form the incentive payment compensation tries to recognize some specific accomplishment on the employee's part. In general, incentive payments inspire the desired performance. The incentives are usually something tangible; most frequently, money. Programs dealing exclusively in intangible rewards or recognition are a legitimate subset of incentives. Generally, employers pay incentives in cash and sometimes in the form of gifts and vouchers, where the employees use them to buy discounted merchandise or service. Incentive is a one-time payment or recognition linked to specific achievements, Even though there are many forms of compensation paid to employees for performing their jobs, incentives tend to be result-oriented. Job satisfaction is the employee's attitude towards his/her job. It is an emotional-state resulting from employees' job appraisal. Hawthorne studies form the biggest prelude to the study of job satisfaction. Elton Mayo of the Harvard Business School and his team mates who carried out this study (1924-1933) and found out the effects of various conditions on workers' productivity and observed that changes in working conditions increased productivity temporarily. This was called as the Hawthorne effect leading to the emergence of the behavioural school of thought.

REVIEW OF LITERATURE
Pattanayak (2005) identifies three categories of incentives as monetary incentives, tangible non-monetary incentives and intangible non-monetary incentives. Monetary incentives are financial rewards provided to employees. Tangible non-monetary incentives are the indirect payment of money in the form of tangible rewards such as gift vouchers, garments, trophies, plaques, vacation trips et al and services like club membership, transport service, meal treats, celebration party et al. Intangible non-monetary incentives involves the social-related and task-related rewards. Social-related rewards pertain to social practices such as employees being courteous and respectful to one another, superiors recognising their subordinates for hard work etc. Task-related rewards include career advancement, job enrichment, and autonomy over work etc. records that incentive schemes designed for employees in the organization influence their performance and behaviour largely. These in turn determine the success and growth of the organization. **George et al - (2008)** in their article mentions job satisfaction is the collection of feeling and beliefs that employees have about their current job. In their opinion, employees' job-satisfaction level ranges from extreme satisfaction to extreme dissatisfaction. Notwithstanding the employees' attitude about their jobs alone, they also exhibit attitudes towards various aspects of their jobs such attitude towards fellow-employees, supervisors, superiors, subordinates and their remuneration **Spector-(1997)** states that job-satisfaction exhibits three important features. First, job-satisfaction indicates employee-effectiveness because high level of job-satisfaction is a sign of good emotional and mental state of employees of the organisations. Second, job-satisfaction is a good indicator of employee-behaviour because employee-behaviour largely depends on level of job-satisfaction affecting business performance. The employee-behaviour shall be positive, when there is job-satisfaction and shall be negative when there is job-dissatisfaction. Third, through evaluating employee job-satisfaction at different levels it would be possible to assess the best set of organisational activities that would help in enhancing the organisational performance. Thus, job-satisfaction indicates best set organisational activities for boosting organisational performance.

IMPORTANCE OF THE STUDY
In an industry, both managers and employees have the same kind of sensitivity towards need-satisfaction. However, the manager controls the means of attaining need-satisfaction at work, while the employee seeks self-development by as far as possible relying on his ability and improving his/her family status. However, for both of them frustration can result when they are not able to satisfy their needs. This frustration slows down their performance leading to depression obstructing their need-satisfaction. There are so many ways to eradicate such frustrations and one specific way of eradicating such frustration is providing them a 'reward' and that is termed as **'incentive'**. Thus, incentives act as catalysts that arouse a dynamic force in an individual influencing his/her behaviour. There are different types of incentives to motivate individuals in the manufacturing sector for better performance. Every employee in the manufacturing sector possesses latent abilities that are mental and physical in nature. The employer, to use those latent abilities of employees, gives incentives to them. Such incentives provide a powerful encouragement to employees towards their performance.
Incentive inter-alia is a device used for enhancing organisational productivity. There are many ways towards improving productivity in manufacturing sector and some of them are as below:
- By adopting improved product design
- By using better quality materials for production
- By employing state-of-the –art manufacturing process
- By adopting efficient work-methods
- By designing result-oriented organisational plans
- By procuring and utilising labour resources effectively at all levels.

Among the above-mentioned ways towards improving productivity, effective labour resource utilisation at various levels prove to be the cheapest, quickest and surest means of improving organisational productivity. Other methods involve lot of time, money and energy. The manufacturing sector in India recognises this advantage of labour utility for enhancing productivity. Hence, manufacturers introduce several incentive schemes. However, there are a few limitations in adopting such incentive schemes as shown below:

- Measuring the quality of the product
- Determining the employee-wise output
- Regularising the work-flow

Despite such limitations, incentive system is becoming more popular because incentive systems stimulate human behaviour. The basic idea of giving incentives to employees is to provide them monetary and non-monetary benefits over and above their periodical remuneration. Incentives are only a means to an end. It is one form of motivation and a technique adopted for improving organisational productivity. The main aim of providing incentives to employees is to motivate them to make them contribute their best. Thus, incentives also referred to as variable compensation is a pay directly related to performance. They may be long-term or short-term associated to the performance of an individual employee, a team of employees or a combination of both individuals and team. An incentive scheme is a plan designed to motivate employees of manufacturing sector. The incentive schemes may be monetary and non-monetary. Incentives influence performance. The National Commission on Labour has provided certain recommendations with respect to incentives. Therefore, understanding the labour incentives' effect on productivity becomes difficult without collecting information about incentives. Further, in addition to incentives motivating employees for a better performance, **employee job-satisfaction** also motivate employees for a better performance. Therefore, in order to study the impact of incentives on employee-job satisfaction the **need** for studying the nature, scope and types of incentives, along with the association between job-satisfaction become imperative. Hence, this situation reveals the significance of the study.

STATEMENT OF THE RESEARCH PROBLEM

The impact of incentives on employee-job satisfaction is a significant issue of research in the domain of industrial relations under Human Resource Management. Many research contributions in this area show an impact of incentives on job-satisfaction. These contributions observed that incentives, when provided can raise productivity by providing a high level of job-satisfaction and may reduce the productivity of the organisations drastically by de motivating the work force in the labour market when the organisations do not provide such incentives. Hence, it is an empirical challenge to observe whether incentives have a positive or negative impact on employee-job satisfaction. A large volume of literature review pertaining to labour incentives and employee-job satisfaction show that there is an impact of labour incentives on job-satisfaction. The review identifies the fact – more the motivation, more the performance, and more the performance, more the productivity. Therefore, the researcher identifies that the employers of manufacturing companies motivate employees by providing incentives and the employers of manufacturing companies motivate employees also by providing them a high level of job-satisfaction, leading to a research question – whether there an association between incentive-schemes and job-satisfaction. In order to find a solution, in TAMILNADU, particularly in the manufacturing companies of Chennai, the researcher conducted a study towards finding out the existence of any relationship between employee-incentive scheme and employee-job satisfaction.

OBJECTIVES OF THE STUDY

The study has the following objectives:

- To understand the manufacturing companies' employees' views about various incentive schemes offered to them.
- To identify the different kinds of monetary and non-monetary incentives offered to the employees in manufacturing companies
- To study the impact of incentives on employee-job satisfaction in manufacturing companies

HYPOTHESES

- The factors of Incentives do not differ significantly.
- The factors of job-satisfaction do not differ significantly.
- There is no significant difference among employees' perception towards labour incentives
- There is no significant difference among employees' perception towards job-satisfaction
- There is no significant influence of demographic variables of employees on the factors of incentives and job-satisfaction.
- There is no significant impact of incentives on job-satisfaction

METHODOLOGY

RESEARCH DESIGN

Research designs are concerned with turning the research questions into a testing project. The best design depends upon the research questions. Every design has its positive and negative side. The research design is a "blueprint" for research, dealing with at least four problems: what questions to study, what data are relevant, what data to collect, and how to analyse the results. This study uses empirical research design and involves both analytical and descriptive type of methodology. The study primarily depends on primary and secondary data.

STUDY AREA

Chennai widely known as Madras till 1996, has a rich tradition and civilisation with a blend of the old and new, vibrating ceaselessly to keep pace with the rest of India, as the buoyant metropolis standing as the third most industrialised state. People in Chennai are deep rooted in their cultural moorings and traditions, even though modernity has its own impact. Chennai is airy, spacious with verdant green patches and beaches. It is the fourth largest city in India. Chennai has regained its pride of place in the automobile industry as the 'Detroit of the south'. The major industries in Chennai include chemicals, automobiles, leather goods, computers, granite ,hardware, shipping, sanitary ware, paint machinery and machine tools, garment and sea food exports, plastics, rubber, conveyors, equipments, hydraulics, lubricants, electronics, timber, clearing & forwarding, packing, hotel & travel industry, jewellery and handicrafts

SAMPLING SIZE AND DESIGN

The research study uses survey method to collect primary data. The survey method employs well-formulated questionnaire and applies multi-range sampling method for generating data. The study adopts a systematic method of selecting samples. The researcher distributed 40 questionnaires to the employees of a small-scale organisation (the name of the company not mentioned in the article for the purposes of maintaining confidentiality) situated 30 kilometres away from Chennai. It is manufacturing company involving intermediate technology dealing with the production of rocker arms. Rocker arm is an automobile part used in all types of automotives. Out of 40 questionnaires, the researcher collected back 35 questionnaires. Out of these 35 questionnaires, 30 questionnaires were usable, rejecting the rest of them. The research study also used Journals, Magazines, Publications, Reports, Books, Dailies, Periodicals, Articles, Research Papers and Websites, company publications manuals and booklets to collect secondary data.

QUESTIONNAIRE DESIGN

The research study involved questionnaires as the instrument to collect primary data and is divided into three parts. The respondents shared their opinions pertaining to labour incentive schemes and employees', job satisfaction. The first part of the questionnaire includes demographic factors with optional questions. The second part of the questionnaire uses optional questions relating to the types of incentives provided by the manufacturing company selected for the study. The third part involves statements relating to employee-job satisfaction with Liker 5-point scale.

SCALING TECHNIQUE IN QUESTIONNAIRE

The questionnaire uses both optional type statements and statements in LIKERT 5-point scale. The response from the employees of the selected manufacturing companies, rated in 5-point scale, as: 5- Strongly Agree 4 – Agree 3 – Neutral 2 – Disagree 1 – Strongly disagree

FRAMEWORK OF THE ANALYSIS

The following are the statistical tools used in the study:

1. **t-test** to ascertain the nature of responses of employees about various labour incentive schemes and significant differences among various factors of labour incentives and job satisfaction
2. **Multiple regression analysis** to find the influence of personal and organizational profile of employees on the factors of labour incentives and job satisfaction
3. **One way Analysis of Variance (ANOVA)** is applied to ascertain the significant relationship between various labour incentive schemes and productivity and their effects with respect to the organisational and personal variables of employees

RESULTS AND DISCUSSION

The researcher distributed the questionnaires to the employees of the organisation of the sample unit and collected the filled-in questionnaires from the respondents for analyses and interpretation. The summary of the results analysed under three parts

PART-I - DEMOGRAPHY

43’3% of the employees of the sample unit lie in the age group 26-35 years followed by 26.7% in the age group of 37-45 years and 20% in the age group of 46-55 years and only 10% in the age group 18-25 years. All the respondents of the sample unit are males (100%). Sixty percent of the employees in the sample unit belong to the shop-floor level while 20% belong to the middle level management 10% belong to the lower-level management and 6.7% of the employees belong to the upper-middle level and only 3.3% of the employees belong to top-level management. 63.3% of the employees in the sample unit are married and 36.7% of the employees are unmarried. Seventy percent of the respondents in the sample unit have higher secondary qualification while 23.3% of the employees are technically qualified and 6.7% of the respondents are graduates. Fifty percent of the employees of the sample unit have 6-10 years experience while 13.3% of the respondents have 11-15 years experience and 16.7 % of the employees have greater than 20 years experience. Only 10% of the employees of sample unit have 0-5 years experience and the same level of percentage prevails in case of employees having 16-20 years. 46.7% of the employees in the sample unit get a gross salary ranging between RS 60,000-1,20,000 and 46.7% in the salary group RS 1,20,000- 1,80,000 and 6.7% in the salary group between RS 1,80, 000 - 240000.

PART-II – TYPES OF INCENTIVES

Twenty percent of the respondents of the sample unit agree that they receive both individual incentives and group incentives. 13.3% of the employees agree that they receive both time-based and output-based incentives. 6.7% of the respondents agree that they receive both types of group incentives - profit sharing and group-bonus schemes. All the respondents (100%) agree that they receive employee-benefits such as allowances, perquisites, ESI and PF fund benefits.

PART – III – JOB SATISFACTION

The study identified the responses of the employees of the sample unit, arranged them with respect to mean values, and applied a parametric t-test. The analysis showed that the employees of the organisation do not have a proud feeling about their jobs. They do not have a high degree of job satisfaction and feel that there is no job security. They also feel that there is no considerable amount of freedom and flexibility in performing their jobs. Further, they are also of the opinion that the scope of their jobs does not help them to achieve their aspirations. They feel that the organisation’s style of supervision is not impressive and the employees do not have a pleasant feeling about their jobs. it is also found that the employees, with the existing job profile, feel that their jobs are not career-oriented. They are also of the opinion that the employees do not have a good amount of participation in managerial decision-making and the management hardly accept any suggestions from the employees. The study used chi-square test to identify the existence of association between the various types of incentives and respondents demography. The test revealed the existence of a significant association between the employees’ designation and monetary incentives. Similarly, the test also revealed an association between monetary incentives and technical education qualification and gross salary ranging between RS 120000-180000 and RS 180001-240000. Further, one-way ANOVA test also revealed a relationship between individual incentives and pride of the job-position, individual incentives and level of employee job security and revealed a relationship between group incentives and job-security.

FINDINGS

The overall study reveals that the level of job satisfaction among employees is low, though the employees of the organisation agree that their employers offer both monetary and non-monetary incentives. With such statistical evidence, it was possible to establish a relationship among job-satisfaction, group incentives and individual incentives using regression analysis. The regression analysis revealed that incentives accounts for 20% of job-satisfaction variance. i.e., when the incentive payment increase or decrease by 20% the level of job satisfaction also increase or decrease by the same 20%. Therefore, the regression model establishes the magnitude of the relationship among job-satisfaction and incentives.

SUGGESTIONS

The study suggests that the manufacturing companies, in order to enhance the level of job satisfaction among its employees must enrich their jobs involving challenging assignments and encourage job-enlargement with more responsibilities in addition to providing them with different kinds of incentives.

LIMITATAIONS OF THE STUDY

Considering the time and cost factor the study is limited only to Chennai region. The study domain confines only to manufacturing companies and therefore the findings through analyses need not be the same for other industrial organisations. The study is only with reference to **ONE** selected manufacturing company in Chennai and does not include all the manufacturing companies located in Chennai. The study is limited only to 30 responses from the employees of manufacturing company in Chennai and hence the views of these respondents need not be the views of the employees of the entire manufacturing companies of the country. The study considers only labour incentives and employee-job satisfaction as motivating elements to induce employees towards a better performance and does not include other motivating elements Questionnaires circulated only to respondents who know to read and write. Thus the study confines its circulation of questionnaires only to literate group and ignores illiterate group who do not know to read and write.

CONCLUSION

Incentives, even though are motivating factors for the employees towards a best performance does not have a remarkable impact on job satisfaction. However, job-satisfaction itself acts as a motivating factor towards better performance. Hence, the study reveals that there is a positive affect of incentives on job-satisfaction. A structural equation model reveals this impact. The researcher considered incentives as the independent variable and Job satisfaction as the unique dependent variable. The model clearly reveals significant influence of incentive scheme on job-satisfaction.

SCOPE FOR FUTURE RESEARCH

Even though many researchers argue that incentive-schemes support improved-performance, but cannot **prove** the same and to prove this, the impact of the incentive programs must be associated with **time-period**. In their researches, they only cite the positive impact of incentive-schemes towards organisational performance and productivity. However, despite highlighting the advantages of incentive pay programs, the effectiveness of the impact of these programs over extended periods, left unexplored. Since the long-term viability of an organization should be the ultimate objective, longitudinal study examining the impact of incentive programs over a time becomes necessary. In addition, it would be interesting to examine whether **gender differences** in incentive pay has a bearing on the incentive-schemes. The organisations offer more incentives to male employees than female employees and surveys reveal that organisations offer men twice the incentives than to women. Future research shall consider the prevalence of such practices. Furthermore, it is crucial that incentive-schemes provided to the employees of manufacturing companies in Chennai and other Indian manufacturing companies remain competitive because international companies will be competing in the product market and price will continue to be an important determinant of consumer choice. Another reason is the labour market shall become more competitive. .The pros, cons, and global impact of such **competitive markets** have to be recognised and therefore this is another significant area left unexplored for future research. Moreover, many research studies observed the effectiveness of labour incentives. However, incentives mean both monetary and non-monetary incentives and which of them between the two, **monetary or non-monetary incentives motivate employees the best**, towards an exemplary work performance is a topic in the agenda for future research.

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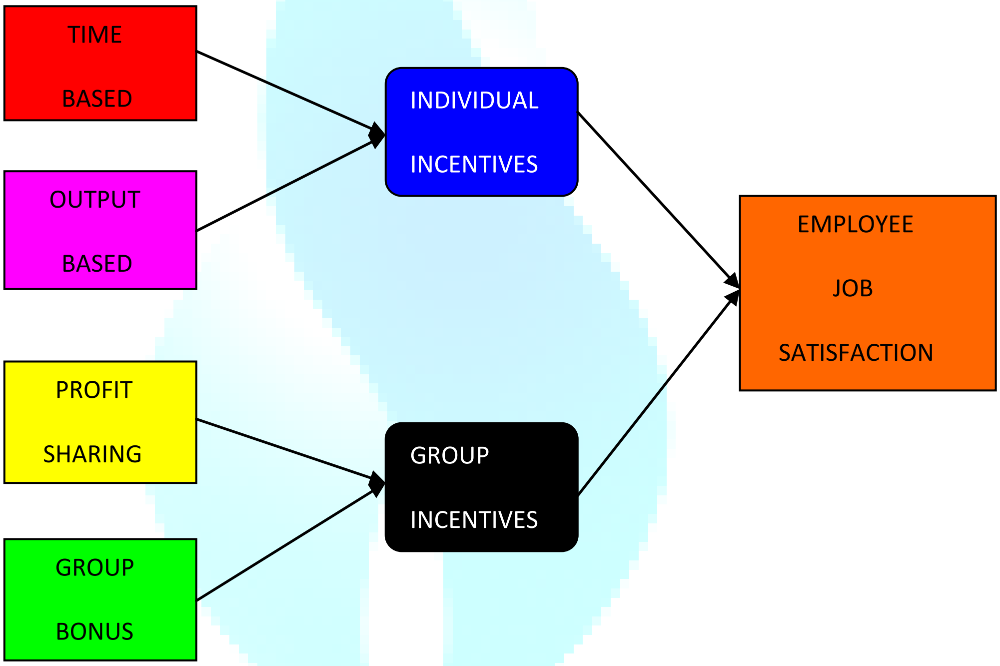
ANNEXURE

MODEL RELATING TO INCENTIVES AND EMPLOYEE-JOB-SATISFACTION

DIAGRAM - 1



PART – I TABLES - RESPONDENTS' PERSONAL PROFILE

AGE

TABLE - 1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	3	10.0	10.0	10.0
	26-35	13	43.3	43.3	53.3
	37-45	8	26.7	26.7	80.0
	46-55	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Source: Primary Data

GENDER

TABLE - 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	30	100.0	100.0	100.0

Source: Primary Data

MARITAL STATUS

TABLE - 3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	19	63.3	63.3	63.3
	unmarried	11	36.7	36.7	100.0
	Total	30	100.0	100.0	

Source: Primary Data

EDUCATION

TABLE - 4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Higher secondary	21	70.0	70.0	70.0
	graduate	2	6.7	6.7	76.7
	technical	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Source: Primary Data

DESIGNATION

TABLE - 5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Shop floor level	18	60.0	60.0	60.0
	lower level	3	10.0	10.0	70.0
	middle level	6	20.0	20.0	90.0
	upper middle level	2	6.7	6.7	96.7
	top level	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Source: Primary Data

EXPERIENCE

TABLE – 6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5	3	10.0	10.0	10.0
	6-10	15	50.0	50.0	60.0
	11-15	4	13.3	13.3	73.3
	16-20	3	10.0	10.0	83.3
	>20years	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Source: Primary Data

GROSS SALARY

TABLE – 7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60000-120000	14	46.7	46.7	46.7
	120001-180000	14	46.7	46.7	93.3
	180001-240000	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Source: Primary Data

MODE OF TRANSPORT

TABLE – 8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	cycle	9	30.0	30.0	30.0
	Two wheeler	16	53.3	53.3	83.3
	public transport	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

Source: Primary Data

NUMBER OF DEPENDENTS

TABLE – 9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	one dependent	4	13.3	13.3	13.3
	two dependents	14	46.7	46.7	60.0
	three dependents	6	20.0	20.0	80.0
	four dependents	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Source: Primary Data

PART – II TABLES -TYPES OF INCENTIVES

INCENTIVES

TABLE – 10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	both	30	100.0	100.0	100.0

Source: Primary Data

MONETARY INCENTIVES

TABLE – 11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	individual	10	33.3	33.3	33.3
	group	14	46.7	46.7	80.0
	both	6	20.0	20.0	100.0
	Total	30	100.0	100.0	

Source: Primary Data

INDIVIDUAL INCENTIVES

TABLE – 12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	time-based	7	23.3	23.3	23.3
	output-based	19	63.3	63.3	86.7
	both	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Source: Primary Data

GROUP INCENTIVES

TABLE – 13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	profit sharing	14	46.7	46.7	46.7
	group-bonus	14	46.7	46.7	93.3
	both	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Source: Primary Data

PART – III – TABLES ON JOB SATISFACTION

RANKING ANALYSIS OF VARAIBLES

TABLE – 14

JOB SATISFACTION	30	1.6	0.498273	0.090972
PLEASANT FEELING	30	1.6	0.563242	0.102833
FREEDOM&FLEXIBILITY	30	1.6	0.621455	0.113462
APPEALING	30	1.6	0.621455	0.113462
CARRER-ORIENTED	30	1.633333	0.614948	0.112274
JOB-POSITION	30	1.666667	0.479463	0.087538
JOB SECURITY	30	1.7	0.534983	0.097674
ASPIRATIONS	30	1.7	0.702213	0.128206
EMPLOYEEPARTICIPATION	30	1.7	0.702213	0.128206
STYLE OF SUPERVISION	30	1.766667	0.678911	0.123952
IMPLEMENTING CHANGES AREPROMISING	30	1.966667	0.718395	0.13116
PAY&EXP	30	2	0	0
SUGGESSTIONS	30	2	0	0
REWARDS	30	2	0	0
	N	Mean	Std. Deviation	std error

Source: Primary Data

VARIABLES ENTERED/REMOVED (B)

TABLE – 15

Model	Variables Entered	Variables Removed	Method
1	GI, II(a)	.	Enter

Source: Primary Data

a All requested variables entered.
b Dependent Variable: JS

MODEL SUMMARY

TABLE – 16

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446(a)	.199	.140	.46213

a Predictors: (Constant), GI, II

Source: Primary Data

ANOVA (b)

TABLE – 17

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.434	2	.717	3.357	.050(a)
	Residual	5.766	27	.214		
	Total	7.200	29			

Source: Primary Data

a Predictors: (Constant), GI, II
b Dependent Variable: JS

COEFFICIENTS (a)

TABLE – 18

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.842	.290		6.358	.000
	II	-.446	.180	-.543	-2.472	.020
	GI	.378	.176	.471	2.144	.041

a Dependent Variable: JS

Source: Primary Data

SERVICE QUALITY AND SERVICE STRATEGIES AS ANTECEDENTS OF CUSTOMER SATISFACTION IN SERVICE INDUSTRY

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ABSTRACT

This paper attempts to address the importance of dimensions of service quality, customer satisfaction as a part of service strategies in service industry. Marketing strategy is the basic approach that the business units will use to achieve its objectives, and it consists of broad decisions on target markets, market positioning and mix, and marketing expenditure levels. As services sector has become more competitive, organizations need to consider ways of developing relationships with their existing customers in order to defend their market share. Strategic dimension of marketing should focus on the direction that an organization would take in relation to a specific market or set of markets in order to achieve a specified set of objectives. Every service firm must recognize that its "strategic posture" depends partly on the competitive environment, partly on its allocation of marketing resources. This paper investigates the importance of implementation and evaluation of marketing strategies in services and whether these marketing strategies are customer centric or organization centric in the long run.

KEYWORDS

Customer satisfaction, Marketing, Services, Strategies, Service quality.

INTRODUCTION

Services marketing strategy focuses on delivering processes, experiences, and intangibles to customers rather than physical goods and transactions. It involves integrating a focus on the customer throughout the firm and across all functions. All company functions marketing, selling, human resources, operations, and R&D – must work together to create effective services marketing strategy. Rather than the traditional goods marketing focus on transactions and exchange, services marketing strategy is centered on the customer, usage, and relationships (Vargo and Lusch, 2004a). Services may be defined as the economic activities that are intangible and perishable in nature and make life convenient. Services are considered to primary revenue generating activities for the firm. Service managers have understood the importance of strategies in the services so as to satisfy the customers or we may say to attain the customer satisfaction so they are managing the competition by differentiating the quality, differentiating the price so on so forth. In recent years the impetus on customer service and customer satisfaction is growing because of the fact of the intensity of the competition within the industry, improvement in the technologies and innovations. Thus in the environment of tough competition, increasing costs and innovations services firm have to deliver on the quality of services and this can be mainly done by revisiting and focusing more and more on the strategies. Business organizations make considerable use of professional services. However, it has received less attention in the context of professional business services than of other consumer services in general. There are few articles to investigate customer satisfactions of the service firms. In the present economic environment, characterized by technological dynamism and intensive competition, the issue of customer satisfaction has become extremely important for the success of any business. If not recognized and responded to rapidly changing business environments effectively, a firm may result in increased pressure of work, lost revenue opportunities, increased costs and, ultimately, in increased levels of customer dissatisfaction (Gurau and Ranchhod 2002). With the emergence of competitive battlefield, the need for an appropriate approach to quality measurement in the context of professional business became apparent. Evidently, there is a need to understand the needs and wants of customer and to devise the marketing strategies according to their needs and wants.

"A service is any activity or benefit that one party can offer to another which is essentially intangible and does not result in the ownership of anything." ***Kotler, Armstrong, Saunders and Wong***

"Services are economic activities that create value and provide *benefits* for customers at specific times and places as a result of *bringing* about a desired change in or on behalf of the recipient of the service." ***Christopher Lovelock***

"Services are the production of essentially intangible benefits and experience, either alone or as part of a tangible product through some form of exchange, with the intention of satisfying the needs, wants and desires of the consumers." ***C. Bhattachargee***

Service quality is nothing but the difference between the service expectation & service actually received by the customer. Customer has certain expectation about the service. If the customer experience the same service as they expect then this difference will be zero and we can say that the service quality is very good. Higher the difference of above equation lower will be the service quality.

FIG. 1

The RATER Model – Service Quality Dimensions

Dimension	Refers to	Specific criteria that customers use
RELIABILITY Delivering on promises	Your ability to perform the promised service dependably and accurately	• Timeliness • Consistency/Regularity • Accuracy
ASSURANCE Inspiring trust and Confidence	The knowledge and courtesy of staff; their ability to inspire trust and confidence	• Staff competence • Respect for stakeholders • Credibility • Probity and confidentiality • Safety and security
TANGIBLES Representing the service physically	The physical representations or images of your service	• Physical facilities • Equipment • Technology • Employees • Communication materials
EMPATHY Treating customers as individuals	The caring individualized attention you provide your stakeholders	• Access (to staff, services, information) • Communication (clear, appropriate, timely) • Understanding the stakeholder • Services appropriate for stakeholders' needs • Individualized attention
RESPONSIVENESS Being willing to help	Your willingness to help customers and to provide prompt service	• Willingness to help • Prompt attention to requests, questions • Problem resolution • Complaint handling • Flexibility

The five dimensions of service quality are applied across all the service industry to evaluate service quality and devising the marketing strategies. :
SERVQUAL has been extensively utilized in assessing service quality of different service providers including banks suggested that "Quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the process of service delivery" (Parasuraman et al., 1985,p.42). Within the SERVQUAL model, service quality is defined as the gap between customer perceptions of what happened during the service transaction and his expectations of how the service transaction should have been performed. SERVQUAL refers to five dimensions of quality:
Reliability (Delivering on promised services)
Assurance (Inspiring trust and confidence)
Tangibles (physical cues available in any service)
Empathy (Giving individualized attention to customers)
Responsiveness (Being willing to help)
As service industry is growing enormously and there is paradigm shift in the economies becoming service driven economies, so the dimensions of service quality are critical in achieving the customer satisfaction and should be given considerable attention.
Since the appearance of Parasuraman et al.'s (1985, 1988) research, which developed their scale to measure service quality (SERVQUAL), numerous researchers have attempted to empirically replicate the instrument's five-dimensional structure as follows:
1. Responsiveness-willingness to help customers and provide prompt service;
2. Assurance-knowledge and courtesy of employees and their ability to inspire trust and confidence;
3. Empathy-caring, individualized attention to customers;
4. Tangibles-physical facilities, equipment and appearance of personnel; and
5. Reliability-ability to perform the promised service dependably and accurately.

GAPS MODEL OF SERVICE QUALITY

Parasuraman et al. (1985) proposed that service quality is a function of the differences between expectation and performance along the quality dimensions. They developed a service quality model based on gap analysis. The various gaps visualized in the model are:
Gap 1: Difference between consumers' expectation and management's perceptions of those expectations, **i.e. not knowing what consumers expect.**
KEY FACTORS LEADING TO GAP 1:
1. Inadequate market Research
2. Poor upward communication
3. Insufficient relationship focus
4. Inadequate service recovery
Gap 2: Difference between management's perceptions of consumer's expectations and service quality specifications, **i.e. improper service-quality standards.**

KEY FACTORS LEADING TO GAP 2:

1. Poor and vague Service Design

2. Absence of customer Driven standards

3. Inappropriate physical evidence and service scape.

Gap 3: Difference between service quality specifications and service actually **delivered i.e. the service performance gap.**

KEY FACTORS LEADING TO GAP 3:

1. Deficiency in human resource policies.

2. Problems with service intermediaries.

3. Failure to match demand and supply.

Gap 4: Difference between service delivery and the communications to consumers about service delivery**, i.e. whether promises match delivery**

KEY FACTORS LEADING TO GAP 4:

1. Lack of integrated service marketing communications.

2. Overpromising

3. Inadequate horizontal communications.

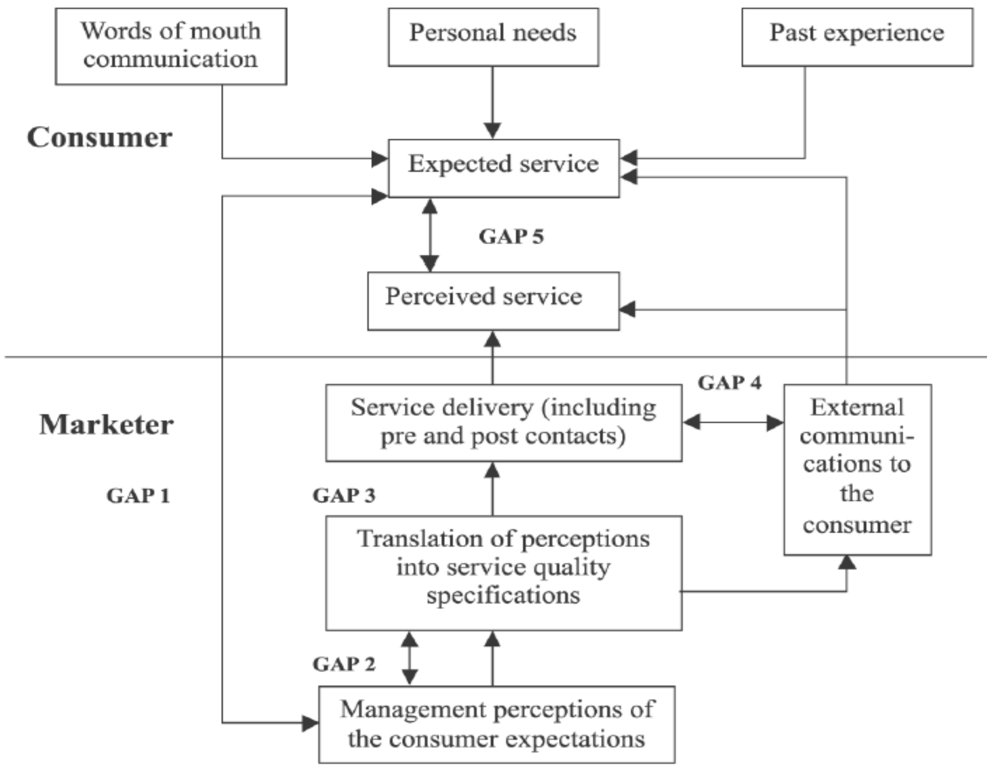
Gap 5: Difference between consumer's expectation and perceived service. This gap depends on size and direction of the four gaps associated with the delivery of service quality on the marketer's side

KEY FACTORS LEADING TO GAP 5:

1. Lack of market research

2. Lack of understanding the requirements of customer

FIG. 2



Source: Parasuraman *et al.* (1985)

CONCLUSION

In this paper, service quality, dimensions of service quality and gaps model of service quality were studied and reviewed. Assessing service quality and better understanding of devising the marketing strategies would help the organization to formulate customer centric services. In today's era of liberalization and globalization the focus of organizations is shifting from profit maximization to customer satisfaction. The pressures of competition are forcing organizations to deliver quality and organizations are spending millions of dollars to improve their service quality and emphasizing on the customer retention. Moreover organizations are adopting these findings of the extensive market research as their strategies.

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THE PRIMACY EFFECT: IMPACT OF INFORMATION'S ORDER ON INVESTORS' PERCEPTION

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ABSTRACT

The annual report is the way to communicate about the business position to the stakeholders. The annual reports provide meaningful information regarding historical performance and prospective future opportunities. The president's letter or director's report is a report submitted by the directors of a company to its shareholders, appraising them of the performance of the company under its direction. It is an exercise of self-evaluation. The letter mainly summaries company's performance and the financial results, discusses company's plans for expansion, diversification or modernization, tells about appropriation of profits, and elaborates company's future prospects and plans for investments. Apart from mandatory disclosure for annual reports to shareholders, it is used as marketing tools which is used to focus the firm's mission, objectives, strategies, and financial performance. The content of the letter is very important because it catch the attention of the readers like shareholders, investors, analysts, suppliers, government, banks, financial institutions etc. That is why it is very important to take care about the information, positive or negative, convey in presidents' letter. This paper tried to examine the impact of ordering (Primacy and Recency effect) of the positive and negative information in the president's letter on readers' perception. The study concludes that the Primacy Effect can be observed due to change in information's order.

KEYWORDS

Primacy effect, Recency effect, information order, chi square test.

INTRODUCTION

The annual report is the way to communicate about the business position to the stakeholders. The annual report provides meaningful information regarding historical performance and prospective future opportunities. The corporate can rewarded with credibility through convincing stakeholders that they are pursuing sound strategy to run the business. Most of the annual reports include a letter from the president or CEO, vision, mission, BOD details, corporate governance, financial statements, auditor's report, stock performance, achievements, risk factors, SWOT analysis etc. CEOs consider annual reports as a communication tool represent the company's and own performance (Bowman, 1984). The president letter represents the financial and non-financial information to the stakeholders. The analysts rely on qualitative information more compare to quantitative information for taking investment decisions (Chugh & Meador, 1984). To understand or read a balance sheet it is required to study the balance sheet i.e., financial accounts of a company, with a view to knowing about the company's financial health, its intrinsic value and hidden risks or strengths. It is nothing but reading the unwritten. Reading a balance sheet is an art as well as a science and its perfection comes only when science and art both are blended. The science is study and analysis of balance sheet items and profit and loss account through various techniques including ratio analysis and the art is taking out inferences and decisions on the basis of the former[A].

The president's letter or director's report is a report submitted by the directors of a company to its shareholders, appraising them for the performance of the company under its direction. It is an exercise of self-evaluation. The letter mainly summaries company's performance and the financial results, discusses company's plans for expansion, diversification or modernization, tells about appropriation of profits, and elaborates company's future prospects and plans for investments. It is a synopsis of the company's activities during the year and during the interim period between the date of the balance sheet and date of the annual report. Director's report should take the investors into confidence by providing useful insights into the activities of the business, more than what the financial statements provide[A]. The annual report is statutorily produced (UNDER SECTION 220, companies Act 1956[B]) document which contained financial information and other details with the usage of photographs and graphs. Empirical research in the US has demonstrated that both the inclusion and content of president's letters significantly affect the judgments of share prices in equity investment decisions (Stanton et al., 2004). Therefore, it is important that the information conveyed to users of accounting narratives reflect financial reality.

Apart from mandatory disclosure for annual reports to shareholders, it is used as marketing tools which is used to focus the firm's mission, objectives, strategies, and financial performance. While financial portions such as the income statement, balance sheet, and changes in financial position are subject to the scrutiny of the firm's auditors, the narrative portions of the document are a direct consequence of corporate communication decisions (Gary & Albert 1992). The letters to shareholders helped in communicating facts about a firm, implicit beliefs for the organization and its relationships with the surrounding world. The content of the letter is very important because it catch the attention of the readers like shareholders, investors, analysts, suppliers, government, banks, financial institutions etc. That is why it is very important to take care about the information, positive or negative, convey in presidents' letter. This paper tried to examine the impact of ordering of the positive and negative information in the president's letter on readers' perception.

REVIEW OF STUDIES ON PRIMACY AND RECENCY EFFECT

The order in which information is learned determines how reliably it will be recalled. The first item in a list is initially distinguished from previous activities as important (primacy effect) and may be transferred to long-term memory by the time of recall. Items at the end of the list are still in short-term memory (recency effect) at the time of recall[E].

The serial position effect, a term coined by Hermann Ebbinghaus through studies he performed on himself, refers to the finding that recall accuracy varies as a function of an item's position within a study list. When asked to recall a list of items in any order (free recall), people tend to begin recall with the end of the list, recalling those items best (the Recency effect). What you remember from what you read is depend on what it is presented during the learning episode. In general it is observed that we remember more for particular time compare to other interval. During a learning episode, we remember best that which comes first, second best that which comes last, and least that which comes just past the middle (David A. Sousa).

The primacy effect, in psychology and sociology, is a cognitive bias that results in a subject recalling primary information presented better than information presented later on. For example, a subject who reads a sufficiently long list of words is more likely to remember words toward the beginning than words in the middle. Greg C Elvers (2003) studied the serial position effect by presenting a list of 30 words. The two conditions were framed and the participants read a list of 30 words. In one condition the participants perform a distracter task for 30 seconds after seeing the list of words. He found higher influence of the Recency effect the last several items cannot be rehearsed in working memory during the distracter task.

Prahlad Gupta (2005) made 3 experiments and found that experiment 1 obtained both primacy and recency effects. Experiment 2 and 3 showed that these effects were not due to the controlled duration of nonwords or the procedure by which non-words were created. In the material of learning of Primacy/Recency effect (David A. Sousa) explained that in 40 minute session first 10 minutes and last 10 minutes have highest information retention ratio compare to middle 20 minutes. The first explained or read item retain for longer duration compare to other information (Primacy Effect). Under the primacy effect the consumers that prefer a particular brand from the outset will never switch to the other brand. The firms compete for initially ignorant consumers, and, therefore, choose the same advertising intensities across both settings. Under the recency effect, on the other hand, each firm's advertising messages affect ignorant consumers as well as those who prefer the rival brand (Oksana Loginova). Glenberg. Bradley, Stevenson, & Gretz (1980) were found that participant repeat those item properly which comes first. It means, the primacy effect had a greater influence on information retention. The information explained at the last also repeated properly compare to middle information. This allows items that are recently studied to have an advantage over those that were studied earlier, as earlier study items have to be retrieved with greater effort from one's long-term memory store (Marshall & Werder- 1972). It means, recency effect is at second influencing part of information set.

HOGARTH AND EINHORN (HE 1992) BELIEF ADJUSTMENT MODEL[5]

The readers have belief towards company and its performance. If the president's letter contains information which supports the readers' belief, it will translate into stock specific decision like buying or holding or selling. The Belief Adjustment model assumes that if information is provided with different order (recency), it can change the readers' perception towards the company. In other words, the information's order (Primacy or Recency) impact significantly on readers' perception. The Primacy effect means the information which read first have more impact on readers' perception compare to the later information. The Recency effect means the information which read recently or lastly has more impact on readers' perception.
According to Belief Adjustment Model the information can be classified as

1. Short: - Short information means in an information set 12 or less than 12 items are mentioned.
2. Long: - Long information means in an information set more than 12 items are mentioned.
3. Complex: - The information provided in quantity. It contains lot of information which can be familiar or non familiar.
4. Simple: - Here the information provided in quality and not in quantity. The characteristic of the information is short, simple and understandable.
5. Consistent: - The flow of information is in same direction. E.g. if information start with positive information it will continue with it. The negative information will come after the end of the positive information set.
6. Inconsistent: -The flow of information is directionless. The information set contains positive or negative information.
7. Probabilistic: - The information set provide information in form of estimation or probability of outcomes. These types of information generally come at first.
8. Evaluative: - The information set provide information in form of evaluation or result. These types of information come at last.

The Primacy effect can observed when the information is consistent and long information set is there. It can also observe when the information is short and simple information is there. The Recency defect can observe when the information is complex, short information is there. For the study purpose the president's letter was formed in such a way that the primacy effect can be observed from the mixed (positive & negative), short and simple information.

OBJECTIVES OF THE STUDY

1. To study the Primacy and Recency impact.
2. To study the impact of change in information's order on readers' perception.

HYPOTHESIS

$H1_0$: - There is no presence of a Primacy Effect in respondents' perception.
$H1_1$: - There is presence of a Primacy Effect in respondents' perception.
$H2_o$: -The perception of respondents' of Section A and B is independent of information's order. (Positive Information only)
$H2_1$: -The perception of respondents' of Section A and B is dependent of information's order. . (Positive Information only)
$H3_o$: -The perception of respondents' of Section A and B is independent of information's order. (Negative Information only)
$H3_1$: -The perception of respondents' of Section A and B is dependent of information's order. . (Negative Information only)
$H4_o$: -The perception of respondents' of Section A and B is independent of information's order. (Opinion Information only)
$H4_1$: -The perception of respondents' of Section A and B is dependent of information's order. . (Opinion Information only)

RESEARCH METHODOLOGY

For this study the article (Jane E. Baird & Robert C. Zelin) was taken as base. The president's letter was taken from Indian Blue Chip Company having rank in top 3 highest market Capitalization Company as on 11/04/2012 and it modified as per requirements. To make it short the necessary changes had been made. To make a letter short and consistent, the whole letter was converted into 12 sentence letter. And the information were classify into two paragraph one with positive information and other with negative information. The primacy effect can be observed from the mixed (positive & negative), short and simple information. The whole information was arranged in two sections. Section A represent the first paragraph with all positive information (Annex. 1) and second paragraph with all negative information. Section B represents the same information but first paragraph with all negative information and second paragraph with all positive information.
The list of scale items for questionnaire survey were taken from Jane & Robert (2000) and modified as per requirements. The respondents were asked to rate the factors on the base of Highly Disagree (Score 1) to Highly Agree (score 5). The respondents were divided into tow group. Each group represents 40 students and seated in different class room. Both the group were asked to read the president's letter carefully and ranked the 38 factors (Annex 2). To avoid the sequential effect the factors were not arranged in sequence. The positive factor followed by negative or opinion factor. There were 12 positive, 11 negative and 15 opinion based factors.

SAMPLE

For the research purpose 80 students of MBA Semester IV were selected. All students were with sound accounting knowledge because they already studied ***Accounting for Managers*** in Semester I. The 40 students were in one class who were given Section A and other 40 students were in other class with Section B.

ANALYTICAL TOOL

To know the difference between the perceptions of respondents, ***chi square test*** was applied. A chi-squared test is statistical hypothesis test in which the sampling distribution of the test statistic is a chi-squared distribution. A test of independence assesses whether paired observations on two variables, expressed in a contingency table, are independent of each other or not. For this study the chi square test helped in testing the differences of two variables (Section A and Section B) were significant or not (Ken Black-2009).

DATA ANALYSIS METHOD

The whole responses were divided into 3 parts as per table 1. The purpose to divide the factors under the heading of positive factors, negative factors and opinion factors was to check out the differences in perception of the respondents towards company after reading the letter. After that the chi square test was applied to know that, is there any significant difference between Section A and Section B?

***TABLE 1: FACTOR CLASSIFICATION**

Factor title	No in Factor list	Total Factors
Positive factors	1,2,3,4,15,16,17,23,26,30,32,36.	12
Negative Factors	5,9,10,11,13,14,24,25,28,33,35.	11
Opinion Base factors	6,7,8,12,18,19,20,21,22,27,29,31,34,37,38	15

DATA ANALYSIS AND INTERPRETATION

HYPOTHESIS 1

To check the Primacy and Recency effect, the mean rating of the responses were found and it can conclude that- "There is a presence of Primacy Effect in respondents' perception."

TABLE 2

Details of Groups	Mean Rating	
	Section A	Section B
Positive	3.68	3.62
Negative	2.67	2.81
Opinion	3.30	3.16

From the table it can reveal that the mean rating of all 3 groups revealed Primacy effect. Because Positive group and opinion group had higher mean rating in Section A compare to Section B. In section A, first paragraph contain only positive information and second paragraph contained negative information. That is the reason for higher mean rating for positive group and opinion group.

Negative group had higher mean rating in Section B compare to Section A because Section B contain first paragraph with negative information and second paragraph with positive information. That is the reason for having higher mean rating in Section B compare to section A.

HYPOTHESIS 2

The Chi Square test was applied to test hypothesis 1, 2 & 3 respectively. The Chi Square generated following results for positive factors.

TABLE 3

*Ranks given for Positive factors					
Positive	**HD**	**D**	**N**	**A**	**HA**
Sec A	1	14	197	192	76
Sec B	9	50	115	244	62

TABLE 4

Calculated Chi-Square	Degree of Freedom	Alfa	P-Value
55.823	4	0.05	0.000

Here, the P value is less than significance level 0.05. So, the null hypothesis was rejected and it can conclude that- "There is significant effect of order change on the perception of two groups for positive factors."

HYPOTHESIS 3: - For Negative factors

TABLE 5

*Ranks given for Negative factors					
Negative	**HD**	**D**	**N**	**A**	**HA**
Sec A	40	167	143	78	12
Sec B	39	151	127	99	24

TABLE 6

Calculated Chi-Square	Degree of Freedom	Alfa	P-Value
8.257	4	0.05	0.83

From the above table it can interpret that P value is more than significance level 0.05. It means, the null hypotheses is accepted and conclude that- "There is no significant effect of information's order change on perception of 2 groups for negative factors."

HYPOTHESIS 4: -For opinion Factors

TABLE 7

*Ranks given for Opinion factors					
Opinion	**HD**	**D**	**N**	**A**	**HA**
Sec A	21	105	204	213	57
Sec B	41	138	162	198	61

TABLE 8

Calculated Chi-Square	Degree of Freedom	Alfa	P-Value
16.436	4	0.05	0.002

The P value is less than the significance level 0.05. So, the null hypothesis is rejected. It can conclude that –"Due to change in information's order the respondents' opinion got changed towards the company."

CONCLUSION

The Primacy effect can be observed in study. The perceptions of all the respondents' were affected due to change in the order of information. The respondents were affected due to change in first paragraph. The letter with first positive paragraph show higher mean rating for Section A and the letter with first negative paragraph show higher mean rating for Section B. These prove the presence of Primacy Effect.

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ANNEXURE

ANNEXURE 1: PRESIDENT'S LETTER

To the shareholders of ABC company:

In 2010-11, ABC attained largest profit growth in its history with record operation and financial results from each of the 3 core segments of petrochemicals, refining and marketing and oil and gas. ABC achieved a record turnover exceeding Rs. 258,000 crore and higher net profit of Rs. 20,286 crore. This landmark performance was a result of strong global economic recovery, India's consumer demand for product and services linked to a better quality of life and best in class manufacturing achievements at all our plants. We are among the 100 most profitable companies in the world. Cash flow from operations and collections reached the second highest level in the history of the company while, at the same time, the percentage of debt to total assets remained unchanged. Improved demand in major markets, along with the results of ongoing cost reduction programs and diligent efforts to improve our products, marketing programs and service to customers should produce increasing future profits. Our company today is broadly diversified with a strong technological foundation and is committed to development of new and better products through a broad research and development effort directed toward emerging businesses that promise high growth rates and proprietary product positions. An additional source of corporate strength can be found in our hardworking and dedicated employees, they are truly our greatest asset.

In the oil and gas business, deep water exploration and development operations presents technological challenges and operating risks. The challenge for ABC is to ensure optimum level of production, safe and reliable operations while maintaining the highest level of health, safety and environment standards. Over the past three years, a large number of new low cost ethylene capacities have come on stream in the Middle East region, which has resulted in margin pressure. The length and severity of the recent recession has caused an increase in the level of receivables and also increase in decline in product demand to the point where some of our customers have not recovered from pre-recession levels. In addition to the above situation, old, inefficient facilities at several of our production location have handicapped our ability to produce acceptable results for the items manufactured. An explosion at one of these facilities has resulted in a lawsuit being filed against the company. The depreciation of the Indian Rupees against other currencies continued to affect adversely both our domestic and international business.

The President

ANNEXURE 2 - FACTORS FOR RESPONDENTS

Sr. No	Details	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	The company appears growth oriented					
2	The performance of company seems good.					
3	The details mention about Company is true					
4	The company Focuses on CSR					
5	In past the company had some hard-hitting					
6	The company appears to have goals and objectives that are compatible with my values.					
7	The company is concerned for employees' welfare					
8	The company required to be more aggressive.					
9	The management has made some poor decisions in the past.					
10	The company had a poor year.					
11	The president is not telling the truth about company.					
12	They required being more aggressive for competitive environment.					
13	The company is not concerned for employees' welfare.					
14	This company is not being socially responsible					
15	The company seems to have a good reputation					
16	The company's management has made some wise decision in the past.					
17	The company appears to be aggressive in its competitive environment.					
18	The goals and objectives of this company are not well matched with m y own.					
19	It would be risky to invest in this company					
20	I will buy the stock of this company					
21	The president seems over pessimist in letter					
22	The current economy will not favor this industry.					
23	The company's future seems bright.					
24	The company's prospects appear weak					
25	The company is over diversified					
26	The company appears to be positioned to face any downturn in the economy.					
27	If I owned stock in this company, I would sell it tomorrow.					
28	The company's stock appears to be risky.					
29	I am ready to invest in this company immediately.					
30	The company's prospects look strong.					
31	If I had stock in this company, I would be confident in my investment.					
32	This company appears to be a safe investment.					
33	The company's future is uncertain					
34	The president's letter is overly optimistic.					
35	Investing in this company is a gamble.					
36	The company's stock appears to be good investment.					
37	The company needs to branch out into new industries					
38	If I owned stock in this company today, I would be dissatisfied with my investment.					

FINANCIAL SYNERGIC IMPACT ON ICICI AND HDFC BANK AFTER MERGER (WITH EVA & MVA APPROACH)

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ABSTRACT

The present paper deals with the Financial Synergic Impact in Banking Industry after merger with special reference to ICICI Bank & HDFC Bank. Merger takes place with a view to improve the financial synergy so its necessary to evaluate whether this financial synergy has created any shareholder wealth or not. Hence the study attempt here to evaluate the impact of financial synergy on shareholder value after merger takes place with EVA & MVA approach.

KEYWORDS

BOR, CBOP, Merger, EVA, MVA.

ABBREVIATION USED

BOR-	Bank of Rajasthan
CBoP-	Centurian Bank of Punjab
EVA-	Economic Value Added
MVA-	Market Value Added
COD-	Cost of Debt
COE-	Cost of Equity
NPAT-	Net Profit After Tax
WACC-	Weighted Average Cost of Capital
BVC-	Book Value of Capital
MVC-	Market Value of Capital

INTRODUCTION

Synergy or the potential financial benefit can be achieved through merger that can be described as a driving force behind merger. Shareholder will get benefit if a company post merger share price increases due to the synergistic effect of the deal. There is a need of better financial planning, reduce cost; desire to expand business and all this can which can be said a part of financial synergy achieved through merger. In the present study we have taken a sample of two leading merger in Indian Banking Industry in the name of ICICI with BOR and HDFC with CBoP with a view of synergic impact using EVA & MVA approach.

PROFILE OF ICICI BANK

ICICI Bank (Industrial credit and Investment Corporation of India) was originally promoted in 1994 by ICICI Ltd. an Indian financial institution, and was its wholly owned subsidiary. ICICI's shareholding in ICICI Bank was reduced to 46% through a public offering of shares in India in fiscal 1998 an equity offering in the form of ADRs listed on NSYE in fiscal 2000.

ICICI is one of the Big four banks of India, along with State Bank of India, Punjab National Bank and Bank of Baroda.

Services: It offers investment Banking, Insurance & Non Life Insurance, Venture capital and Assets Management.

BSE & NSE : ICICI Bank's equity shares are listed in India BSE and on NSE and its American Depository Receipts (ADRs) are listed on the New York Stock Exchange (NYSE).

Merger approved on May 23, 2010 but announcement from RBI, all branches of BOR will operate under the function of ICICI Bank w.e.f August 13, 2010. Swap ratio was 25:118 (BOR shareholders would get25 shares of ICICI for 118 shares of BOR). The value of merger was $30.41 billion.

The merger added significant value to ICICI Bank in terms of low cost deposit raito, greater opportunities for earning fee based income, ability to participate in the payment system, to provide transaction banking services, entry into new business segments, larger capital base and scale of operations.

PROFILE OF HDFC BANK

HDFC Bank (Housing Development and Finance Corporation) was amongst the first to receive an 'in principal' approval from RBI to set up a bank in Pvt. Sector as part of RBI's liberalization of the Indian Banking Industry in 1994.

Services: It deals in Commercial Banking, Personal Banking Services, Merchant Banking Services, Auxiliary Services, Consumer Banking Services, Deposit and Money Placement Services, Trust and Custodial Services, International Banking Services, Priority Sector Banking and Depository Baking Service.

BSE & NSE: HDFC Bank's equity shares are listed in India BSE and on NSE and its American Depository Receipts (ADRs) are listed on the New York Stock Exchange (NYSE) and its Global Depository Receipts are listed on Luxembourg Stock Exchange.

Merger approved on May 23, 2008, swap ratio was 29:1(CBoP shareholders would get 1 shares of HDFC for 29 shares of CBoP). The value of merger was $2.5 billion. The nature of merger was horizontal, the objectives was to gain economies of scale, wide line product and dominance in the competitive banking industry in India.

The merger added significant value to HDFC Bank in terms of increased branch network, geographic reach, customer base and a bigger pool of skilled manpower.

DATA METHODOLOGY

NEED OF THE STUDY

The study deals with the financial synergic impact on shareholder value after merger of ICICI Bank and HDFC Bank, because one of the purpose of merger can be said to increase the shareholder value, so it's necessary to check whether the merger has created any shareholder wealth or not.

OBJECTIVES OF THE STUDY

1. To study the impact of financial synergy on the shareholder value of the selected banks (ICICI and HDFC Bank)
2. To give suggestion on the basis of findings

DATA SOURCE

Data has been taken for selected bank from Moneycontrol.com and the financial statement of the bank's website before and after 3 years of merger.

ICICI & BOR 2008-2010/2012-2014
HDFC & CBOP 2006-2008/2010-2013

RESEARCH METHODOLOGY

EVA & MVA approach has been taken into consideration to check the synergic impact on the shareholder value after merger.

EVA Approach

EVA is the difference between NPOT and WACC
WACC means weighted average cost of capital.
COD: Average of Opening and Closing debt has been taken into account which is given in the balance sheet for the year ending 31st march each year.
COE: It has been calculated using 1/PE ratio, PE ratio has been directly taken from the financial statement of selected banks from moneycontrol.com

MVA Approach

The higher the MVA the better it is. A high MVA indicates the company has created substantial wealth for the shareholders. A negative MVA means that the value of management's action and investment are less than the value of capital contributed to the company by the capital market.
It's the diff between the market value of the company and capital contributed by investors (both bondholders and shareholders).
MVA=V-K
V= MV of the firm , including the value of firm's equity and debt
K=capital invested in the firm

DATA ANALYSIS AND INTERPRETATION

The data has been analyzed from the **acquiring company perspective** only, 3 years data before and after the merger has taken into the study. The year **2008** and **2010** of merger has not been taken into account for the analysis of data.
The **NPAT** and **WACC** are given in the below mentioned table:-

TABLE 1: ICICI-EVA-2010-2011 (has not been taken for analysis, it's a merger year)

Years	COE %	COD %	WACC	P (E) %	P (D) %	NPAT	EVA
							NPAT-WACC
2008	0.05	0.28	0.25	0.12	0.88	4157.73	**4157.48**
2009	0.10	0.23	0.21	0.12	0.87	3758.13	**3757.92**
2010	0.04	0.14	0.12	0.12	0.86	4024.98	**4024.86**
			After Merger				
2011	**0.04**	0.11	0.10	0.12	0.86	5151.38	**5151.28**
2012	0.06	0.12	0.11	0.12	0.88	6465.26	**6465.15**
2013	0.07	0.12	0.01	0.12	0.88	8325.47	**8325.46**

TABLE 2: HDFC-EVA-2008-2009 (has not been taken for analysis, it's a merger year)

Years	COE %	COD %	WACC	P (E) %	P (D) %	NPAT	EVA
							NPAT-WACC
2006	0.23	0.27	0.27	0.07	0.93	1115.94	**1115.67**
2007	0.23	0.62	0.60	0.07	0.93	1382.54	**1381.94**
2008	0.17	0.83	0.77	0.09	0.91	1590.18	**1589.41**
			After Merger				
2010	0.17	0.55	0.51	0.10	0.90	2948.7	**2948.19**
2011	0.18	0.45	0.43	0.09	0.91	3926.4	**3925.97**
2012	0.04	0.48	44.01	0.09	91.14	5167.09	**5123.08**
2013	0.04	0.43	0.39	0.09	0.91	6726.28	**6725.89**

TABLE 3: MVA-ICICI-HDFC

ICICI				HDFC Bank			
Years	BVC	MVC	MVA	Years	BVC	MVC	MVA
2008	46820.21	88818.30	41998.09	**2006**	5299.60	13200.59	7900.99
2009	49883.02	38553.38	-11329.64	**2007**	6433.15	45926.51	39493.36
2010	51618.37	110012.27	58393.90	**2008**	11497.23	63536.13	52038.90
2011	55090.93	128919.36	73828.43	**2010**	21522.49	93065.98	71543.49
2012	60405.25	102816.71	42411.46	**2011**	25379.27	112913.80	87534.53
2013	66705.96	120718.97	54013.01	**2012**	29924.68	125110.82	95186.14
				2013	36214.14	150501.20	114287.06

ICICI BANK

EVA- It can be observed from the above data that there has been an increase in the case of NPAT and EVA of ICICI bank which can be described as the positive impact of merger on the financial synergy of bank which has helped in increasing a shareholder value in the market. After merger (2010) the bank has acquired higher EVA and NPAT in the years 2012 and 2013.

MVA-In 2009, as it can be observed from the data that before 1 year of merger MVA of ICICI was negative, but in the year of merger there has been an upward movement. But very soon in the next year it went down but in the year 2013 again a shift can be seen in the MVA of ICICI which can be said a positive impact on the shareholder wealth of bank.

HDFC BANK

EVA-There has been an increasing trend can be observed in the EVA & NPAT of HDFC Bank . COE has been reduced in the coming years after merger. A positive trend can be seen in 2013 which can be said a good factor after merger in the EVA of bank.

MVA- In the case of HDFC bank's MVA a positive trend can be seen during the study period, which is a satisfactory factor from shareholder's point of view, because higher MVA means higher value of the firm. Higher value of the firm will bring higher return for the shareholders.

CONCLUSION

In order to justify the decision of merger it's necessary to generate profit after merger. Post-merger Result can be said satisfactory as banks have achieved higher NPAT after merger it can be said beneficial for both the banks. Upward movement can also be observed in the case of MVA, which means higher value of the firm.

Positive Impact: EVA and MVA are increased after the merger of both the banks. Benefits like wide network of branches, broad range of products and skilled man power has been achieved through merger. Merger has helped in creating better shareholder value for bank's shareholders in future.

RECOMMENDATIONS

Company needs to measure the value to determine its current status and EVA & MVA can be helpful to determine credit worthiness, tax purpose or sustainability for acquisition by a larger firms. Both use different techniques and returns with different result. EVA can be calculated within the common company instead of entire company e.g. for departments and product lines. It will allow more details and comparison form the decision making perspectives. MVA offers a judgment on company's past, present and future use of invested capital.

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ROLE OF REGIONAL HEAD OF STATE'S ATTITUDES IN IMPLEMENTATION OF FINANCE POLICY ABOUT THE GOVERNMENT ACCOUNTING STANDARDS IN INDONESIA

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ABSTRACT

Indonesian state financial policies have undergone major changes since the release the Law on State Finance package in 2003 and 2004 as well as the Law on Local Government Package of 2004. The legislation has been set up clearly financial management with a transparent and accountable as well as the financial management in the region from President to the Regional Head. This implies a stronger role of the Regional Head in implementing the financial policy in the local government. The financial policy communication to local governments are often disruption whereby the policy is not communicated clearly and consistently. This study is a single case study for examining the phenomenon in which the object of research is the Semarang City Government as the only one that has been implemented government accounting standards accrual-based policy. In adequately of the financial policy's communication about implementation of government accounting standards accrual-based policy from the central government to the local government can be overcome by the attitude of the Regional Head avoiding uncertainty (uncertainty avoidance) and has a vision for the future (confucian dynamism) so to encourage the attitude of the staff at the local government and also encourage the emergence of support from external parties to support the implementation of the financial policy of the country.

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KEYWORDS
finance, head region, implementation, policy.

1. INTRODUCTION

Financial management in Indonesia is regulated in the legislation package on state finances, in Law Number 17 of 2003 Year on State Finance, Law Number 1 of 2004 Year on State Treasury and Law Number 15 of 2004 Year concerning State Finance and Accountability. Package of laws on the state finances become a strong legal foundation for implementing state financial management reforms. The State Financial management has set out clearly and firmly about the financial and asset management system that follows the development of public sector management in order to promote the establishment of the transparent and professional state financial management. The Package of laws on the state finances has instructed local and central governments to implement accrual basis in 2008 and the governments may apply cash toward accrual before 2008.

Law Number 32 of 2004 Years on Local Government which gives autonomy to the regions included in the financial management area. Although the President has handed over the financial management to the Regional Head, but the arrangements of region's financial management have to be implemented within the framework of the state financial administration system. Regional Head should obey the laws and government regulations and ministerial regulations about state financial management, including regional financial management. Though the financial policy communication to local governments are often disruption whereby the policy is not communicated clearly and consistently. Regulations drawn up by the central government that should serve as guidelines for regional government in managing local finances available is incomplete , unclear content and inconsistent with other relevant regulations. These regulations include guidelines for formulating the budget, local budget execution and accountability of use of local budgets (BPK audit reports and interviews with executors of financial management in Semarang City Government and other local governments that observed implementation of accrual accounting basis in Semarang City Government).

The fact that the central government policies related to financial management is still incomplete, unclear and inconsistent with the relevant policies so the financial manager lead to confuse in managing the financial of local government which affects the difficulty in preparing the financial statement. Financial statement is an instrument for local government to account the use of local budget to parliament. In preparing financial statement, government should obey to government accounting standards. Government accounting standards in Indonesia referring the development of accounting standards internationally in government by the transition from cash accounting basis to accrual accounting basis. The Regulation of Government about the Government Accounting Standards (SAP: Standar Akuntansi Pemerintahan) based on accrual basis just published in 2010. That is the Government Regulation No. 71 Year 2010. In terms of the reporting entity (the financial report's authors) can not apply, the reporting entity may apply the cash toward accrual basis of a maximum of 4 (four years) after fiscal year in 2010 (2015). The command to implement accrual accounting basis in The Government Regulation No. 71 Year 2010 does not obey to The Package of Laws on The State Finances in which should have implemented in 2008.

The focus of this study is implementation of public policy, meanwhile, developments in the theory and implementation of research public policy are covered by the dubious issues of the quality of policy implementation theory (Paudel, 2009).

Based on the background of the above-mentioned problems, researcher formulates the problem to be studied is “What role of Regional Head’s attitudes (disposition) in implementing the financial policy of the country ? "

2. REVIEW OF LITERATURE

A. POLICY IMPLEMENTATION THEORY

1. Model of policy process refers toThomas R. Dye (1972) includes:

a) *identification of policy problem*
b) *agenda setting*
c) *policy formulation*
d) *policy legitimation*
e) *policy implementation*
f) *policy evaluation*

2. Definitions of policy implementation:

Implementation is evident that a wide variety of factors – from the availability of sufficient resources to the structure of intergovernmental relations, from the commitment of lower level officials to reporting mechanism within bureaucracy, from the political leverage of opponent of the policy to accident of timing, luck, and seemingly unrelated events-can and do frequently intervene between the statement of policy goals and their actually delivered (Grindle, 1980).

3. Model of Policy Implementation

a) Model Edwards III (Edwards III, 1980: 9-12)

The importance of reliable information on implementation cannot be underestimated. When policymakers lack information about implementation, they may not only terminate a potentially successful program, but they also may expand a program inappropriately (Edwards III, 1980: 9).

Edwards III use four critical variables in implementing public policy: *communication, resources, dispositions or attitudes and bureaucratic structure which are operating simultaneously and interacting with each other to aid or hinder policy implementation.*

1) *Executors must know what they are supposed to do, so orders to implement policies must be transmitted to the appropriate personnel, and they must be clear, accurate and consistent* ***(communication)***

*2) If the personnel responsible for carrying out policies lack the resources to do, implementation will not be effective. Important resources include staff, information, authority and facilities (****resources).***

*3) The executors must desire to carry out a policy (****dispositions/attitudes).***

*4) An implementation may still be thwarted because of defiencies in bureaucratic structure: fragmentation may hinder coordination and SOPs (standard operating procedures) designed for ongoing policies are often inappropriate for new policies (****bureaucratic structure).***

The concept of Edwards III (1980: 150-153) on policies that potentially, it will get the problems in its implementation, namely:

1) New policy. The new policy could be complicated in the implementation, such as: a) the communication channels advanced have not built yet, b) the objectives to be achieved tend to be blur, c) implementation guidelines tend to be unclear, d) new programs tend to face the limitation of sources in the form of complete information and adequate staff, e) vagueness and inconsistency of the programs give the impact on low-priority concern of implementation, f) new programs require action that is inconsistent with the routine, g) a new policy tends to be changed in accordance with the previous SOP.

2) Decentralization policy. Decentralization policy will involve a lot of people that face condition, a) communication transmission line is inadequate, especially in the lower governmental and private sectors, b) the growing number of organizations make many distortions as the risk, c) long distances to the implementer can make misunderstanding, d) the implementation tends to have selective perception due to a breakdown of communication, e) the work information is less available so that monitoring is less effective.

3) Complicated and complex policy. Complicated and complex policies becoming an obstacle of the availability of human resources who understand accrual accounting, it is exacerbated by the lack of completeness of policy / technical guidance toward the policy. Complex policy has many goals, the complicated content, the less of policy makers know how to set it up specifically and often require policy / technical manual. Unavailability of personnel who can explain technical issues makes the implementer using his own interpretation that does not conform to policy.

b) Model Grindle (Grindle, 1980: 8-15)

Model Grindle used content and context to answer these questions:

Content: what effect does the content of public policy have on its implementation?

Context: how does the political context of administrative action affect policy implementation?

c) Model Mazmanian and Sabatier (Mazmanian and Sabatier: 1983)

Model Mazmanian and Sabatier used independent variable, intervening variable and dependent variable to explain the implementation model:

1) Independent variable: Tractability of The Problem

Tractability of the problem include: technical difficulties, diversity of target group behavior, target group as a percentage of the population, extent of behavioral change required

2) Intervening variable include Ability of statute to structure implementer and no statutory variables affecting implementation. Ability of statute to structure implementer include Clear and consistent objectives, Incorporation of adequate causal theory, Initial allocation of financial resources, Hierarchical integration within and among implementing institutions, Decision rules of implementing agencies, Recruitment of implementing officials, Formal access by outsiders. No statutory variables affecting implementation include socioeconomic condition and technology, public support, Attitudes and resources of constituency groups, support from sovereigns, Commitment and leadership skill of implementing officials.

3) Dependent variable is stages (dependent variables) in the implementations process include policy output of implementing agencies, compliance with policy output from target groups, actual impact of policy output, perceived impact of policy output, major revision in statute.

d) Model Adil Najam with 5C Protocol in implementation (1995: 4-7*):*

1) ***Content*** *of the policy itself. What it sets out to do (goals); how it problemizes the issue (causal theory); how it aims to solve the perceived problems (methods)*
2) *The nature of the institutional* ***Context.*** *The corridor (often structured as operating procedures) through which policy must travel, and by whose boundaries it is limited, in the process of implementation*.
3) *The* ***Commitment*** *of those entrusted with carrying out implementation at various levels to goals, causal theory, and methods of the policy.*
4) *The administrative* ***Capacity*** *of implementers to carry out the changes desired of them.*
5) *The support of* ***Clients and Coalitions*** *whose interest are enhanced or threatened by policy, and the strategies they employ in strengthening or deflecting its implementations.*

B. ACCRUAL BASED ACCOUNTING THEORY

1. DEFINITON OF ACCRUAL ACCOUNTING

"Accrual accounting is an accounting methodology where transaction are recognized as the underlying economic events occur, regardless of the timing of the related cash receipts and payments" (Khan and Mayes, 2007: 3).

*"The cash basis recognizes revenue when cash is received and recognizes expenses when cash is paid. The accrual basis of accounting recognizes revenue when realized (realization concept) and expenses when incurred (matching concept). The cash basis usually does not provide reasonable information about the earning capacity of the entity in the short run. There for the cash basis is usually not acceptable. If differences between the accrual basis and the cash basis are not material, the entity may use the cash basis as alternatives to the accrual basis for income determination. Usually, the difference between the accrual basis and the cash basis is material (*Gibson (2007: 18)*".*

2. THE BENEFITS OF ACCRUAL ACCOUNTING BASIS

a. IFAC (2003: 12)

The advantages of accrual basis have been recognized, namely:

1) *it shows how a government has financed its activities and met its cash requirements*
2) *it allows users to evaluate a government's ongoing ability to finance its activities and to meet its liabilities and commitments*
3) *it shows the financial position of a government and changes in its financial position*
4) *it provides a government with the opportunity to demonstrate successful management of its resources and*
5) *It is useful in evaluating a government's performance in terms of its service costs, efficiency and accomplishments.*
6) *financial reports prepared on an accrual basis allow users to:*
7) *assess the accountability for all resources the entity controls and the deployment of those resources;*
8) *assess the performance, financial position and cash flows of the entity; and*
9) *make decisions about providing resources to, or doing business with, the entity.*

b. Gibson (2007: 18)

"The cash basis usually does not provide reasonable information about the earning capacity of the entity in the short run. There for the cash basis is usually not acceptable. If differences between the accrual basis and the cash basis are not material, the entity may use the cash basis as an alternative to the accrual basis for income determination. Usually, the difference between the accrual basis and the cash basis is material".

c. Tudor and Blidisel (2008)

"Accruals" is not a magic solution" for improving the performance of the public sector. It is simply a tool for getting better information about the true cost of public sector institutions. It needs to be used effectively and in tandem with a number of other management reforms in order to achieve the desired improvement in decision-making in the public sector".

3. THE COMPLEXITY OF ACCRUAL ACCOUNTING BASIS

The complexity of the accrual accounting basis is expressed by several other researchers, namely:

a) Wynne (2004: 12-25)

The European Federation of Accountants and the IMF revealed there are great cost and a great risk when a country implements the accrual accounting basis. IFAC statement related accounting reforms in France are beginning to apply the accrual accounting basis in 2005:

"Transition to accrual accounting is a long-term project. National and international experience indicate that a time period of about 8 to 10 years is needed to change the accounting system and fully implement the necessary reforms".

Furthermore, the experience of implementation in the United Kingdom, The UK National Audit Office made a similar conclusion in the report related to the ten-year implementation of accrual accounting basis in the UK (the first, in 1993), which were carried out based on the review of the following conditions are found: 1) the impact of improving the quality of public services is still not perceived; 2) a half of the departments still use cash information and accrual recording to fulfill the requirements; 3) the development facing barriers to the limitations of technology and financial information; 4) the benefit accrual information has not been used to improve the efficiency and performance of the department, and 5) staff expertise is still needed to be developed because of the accrual complexity.

Internationally, the limited experience of governments moving to the accrual basis of accounting means that there are still a significant number of risks involved in adopting this approach. These may include

1) *loss of financial control with the introduction of a more complex system*
2) *reduction in budgetary control*
3) *diversion of resources from more productive reforms*
4) *the possibility of government accounting being brought into disrepute if accrual accounting fails*
5) *the possibility that international accounting standards could be applied with no real understanding of the issues involved, especially as they are principles-based standards*
6) *the 'gaps' in the standards not being properly addressed*
7) *the standards not being continually made up to date and relevant*
8) *decisions on accounting treatment being made on political grounds*
9) *the external auditor being unable to prevent politically-based amendments to the accounts*
10) *an adequate timescale and budget not being allowed for the change*
11) *the IT systems not being adequate*
12) *the process of financial management and expenditure control being made more difficult for members of Parliament and*
13) *members of Parliament, the government, staff of the ministry of finance and other ministries and the external auditors not being given enough training.*

b) IFAC (2003: 34)

Some aspects needing the continuing costs in implementing accrual accounting basis, namely:

1) *identifying and valuing existing assets*
2) *developing accounting policies*
3) *establishing accounting systems, including the purchase of computer systems and pilot testing these systems*
4) *developing the necessary skills and providing training for both the preparers and users of financial information.*

c) Shafritz and Russel (1997: 563)

"The transition from cash to accrual accounting has not been simple. Controversy has raged over issues such as asset valuation."

3. RESEARCH METHODOLOGY

This study used a qualitative approach and case study method because the researcher intends to acquire in-depth overview of the implementation of the financial policy of the Indonesian government in the region. This study is a single case study for examining the phenomenon in which the object of research is Semarang City Government as the only local governments that have implemented government accounting standards (SAP: Standar Akuntansi Pemerintahan) based accrual as the financial policy in arranging the financial statement. Accrual-based SAP implementation is the focus of this study because of the financial state regulations are inconsistent in managing the implementation of accrual-based SAP, the SAP-based guidelines on the implementation of accrual has not been prepared by the Central Government as well as of any inconsistency between the rules concerning financial management complicate Local Government in preparing the financial statements.

To enrich the understanding of researchers and support in deciding conclusions, the study also conducted a limited comparison with the implementation of accrual accounting basis in other countries through the study of literature. Because of the focus of the research is the implementation of policies in the areas of accounting, the researchers also used the theories in accounting field of as a reference beside implementation policy theories so that the theory behind this research is multidisciplinary.

Data collection techniques of the study are through interviews and document analysis techniques. In addition, making observations was used, especially concerning the implementation of SAP based accrual in preparing financial statements. The Researchers also utilize information from others such as academics that understand or pay attention to the government's financial reports as well as Governmental Accounting Standards Committee (KSAP) as a constituent of Government Accounting Standards (SAP). The informants supporting the completeness of the information are the observer derived from other Local Governments conducting a comparative study on the implementation of SAP-based accrual accounting in the Semarang City Government. The informants are from Tangerang City Government, Pontianak City Government and Cilegon City Government.

TABLE 1: ANALYSIS RESEARCH UNIT

Fundamental Unit	Intermediate Unit	The Smallest Unit
Executive (executors of SAP accrual based accounting)	Head of Regional, Semarang City Government Entity (SKPD)	Leaders, Employees
Legislative (user of accrual based financial statements)	Parliament of Semarang City	Members
Monitoring and evaluation *Quality Control*	Inspectorate of Semarang City (internal auditor)	Leader, Auditors
Quality Assurance	BPK (external auditor)	Auditors

Secondary data in this study were taken from the documents relevant to the issues and research focus, including: 1) the relevant government policies; 2) The financial report produced; 3) Data and information on the relevant research location; 4) the relevant Inspectorate's Review report; 5) the relevant audit report of Supreme Audit Board; 6) the results of previous studies relevant; 7) Information on relevant media.

This study had been performed from 2012 to 2013.

4. RESULTS AND DISCUSSION

Semarang City Government is the only local governments that have implemented accrual accounting since 2002, although the Central Government has not implemented. Though the regulation in government accounting standards still gives leeway to implement accrual based accounting in 2015.

Interview with Head of Regional and executors of financial managements of Semarang City Government found that during the implementation of accrual based accounting, Semarang City government faces obstacles related accrual accounting practices which are more complicated and complex than cash accounting practices that have been applied previously. This conclusion also stated by the observers derived from other Local Government conducting a comparative study on the implementation of SAP-based accrual accounting in the Semarang City Government. All informants said that the condition was complicated by inadequate of communication state policies, human resources are less competent and lack of central government support. Problems in communication financial states policies to local government include central government policies that are incomplete, unclear and inconsistent with other relevant policies in which confuse executors in local government to implement policy about accrual accounting basis. The lack of support perceived coming from the Central Government which does not provide assistance to the Semarang City Government as the only Local Government implementing accrual-based SAP. Central Government also has not developed technical guidance in implementing accrual accounting baseds for local government.

Semarang City Government often finds the difficulties or problems in preparing financial statement so that by review of the Inspectorate and audit from BPK toward the financial statements of Semarang City Government, there is still found mistakes recording. These mistakes majority in recording revenue, receivable and asset account. However, after implemented SAP accrual based accounting for three (3) years, in the financial statements for 2012, the BPK as government external auditors have given unqualified opinion for the financial statements in Semarang City Government which accordance with accrual-based government accounting standards.

A. HEAD OF REGIONAL INITIATIVES

Interview with Head of Regional (Semarang Mayor), Regional Government Secretary and Head of Department of Asset and Financial Management revealed that implementation of the government's financial statements with the accrual basis of accounting in Semarang City Government driven by the euphoria of reforms in the period into 2000 evidenced by the birth of the Package of Law on State Finance in 2003. Conditions at the time caused the Semarang Mayor's initiative (in 2002) to immediately implement accrual accounting despite government regulation governing the accrual-based governmental accounting standards not yet published. The Mayor's hope is the City of Semarang became a pioneer in preparing financial statements that are transparent and accountable, as implemented in the commercial sector (private).

The Package of Laws on State Finance is Law No. 17 of 2003 on State Finance and Law No. 1 of 2004 on State Treasury has anticipated the changes in government accounting standards in Indonesia referring the development of accounting standards internationally in government, namely the implementation of accrual accounting basis, in 2008. The Package of Laws on State Finance instructed Government to develope Regulation of Government about Government Accounting Standards but the Regulation of Government about the Government Accounting Standards (SAP: Standar Akuntansi Pemerintahan) based on accrual basis just published in 2010. That is the Government Regulation No. 71 Year 2010. Accrual basis is effective for financial statements in 2010. In terms of the reporting entity (the financial report's authors) can not apply, the reporting entity may apply the cash toward accrual basis of a maximum of 4 (four years) after fiscal year in 2010 (accrual basis will be effective in 2015). This means that the Government Regulation No. 71 Year 2010 is inconsistent with the Package of Laws on State Finance.

Dimensions of cultures refer to Hofstede (1987: 5-12) are Power Distance, Individualism (Collectivism), Masculinity (Feminity), Uncertainty Avoidance, and Confucian Dynamism. Hofstede's fourth dimension is uncertainty avoidance, the extent to which people in a culture feel threatened by uncertain or unknown situations. Hofstede explains that this feeling is expressed through nervous stress and in a need for predictability or a need for written and unwritten rules. In these cultures, such situations are avoided by maintaining strict codes of behavior and a belief in absolute truths. Cultures strong in uncertainty avoidance are active, aggressive, emotional, compulsive, security seeking, and intolerant; cultures weak in uncertainty avoidance are contemplative, less aggressive, unemotional, relaxed, accepting of personal risks, and relatively tolerant. The uncertainty in implementation of accrual based accounting is unclear attitude of the central government in obeying packet command laws on state finances for implementing accrual accounting. Semarang Mayor initiative to implement accrual basis immediately shows that cultural attitudes of Mayor avoiding uncertainty (uncertainty avoidance dimension). Dimension "Confusian Dynamism" to show that it deals with a choice from Confucius ideas and that its positive pole reflects a dynamic, future-oriented mentality, whereas its negative pole reflects a more statics, tradition-oriented mentality. Semarang Mayor initiative to change its traditional financial management and then to implement accrual basis immediately because in 2015 every entity of government in Indonesia has to implement accrual based accounting shows that cultural attitudes of Mayor are dynamic and future oriented.

Framework for policy implementation by Grindle (1980), states that the successful implementation of the policy is determined by the degree of implement ability of policies which include interests that are affected by the policy. Semarang Mayor interest to become a pioneer in the implementation of accrual accounting is in line with the policy which mandates the implementation of accrual accounting in Package Laws on State Finance.

B. COMMITMENT OF REGIONAL HEAD

Semarang Mayor Initiative in 2002 to implement the accrual basis of accounting followed by the next Mayor of Semarang (there are two times a change of mayor).

Since it was implemented earlier (in 2002), Semarang City Government does not require a lot of changes in order to prepare financial reports in accordance with accrual-based SAP that just published in 2010. However, in implementing accrual-based SAP, Semarang City Government often finds the difficulties or problems so that by review of the Inspectorate and audit from Supreme Audit Board (BPK: Badan Pemeriksa Keuangan) toward the financial reports of Semarang City Government, there is still found mistakes recording. These mistakes majority in recording revenue, receivable and asset account.

The complexity of the accrual accounting basis is expressed by several other researchers. The experiences of other countries that have implemented accrual revealed that the transition to accrual accounting need many years (long term project) and enormous resources (skill of staffs and accrual based accounting information system). Besides that, staff expertise (preparer also user of financial statement) and information system also accounting policies are still needed to be developed because of the accrual complexity and these will become continuing cost. The limited experience of governments moving to the accrual basis of accounting means that there are still a significant number of risks involved in adopting this approach in which the risks will impact on loss of financial control of governments. Although transition to accrual accounting is high cost and risky but the benefit is not impact directly. The experiences of other countries that have implemented accrual, the impact of improving the quality of public services is still not perceived and the benefit accrual information has not been used to improve the efficiency and performance of the department.

Despite facing obstacles in implementing accrual accounting that technical regulations are not yet available, the human resources that are less competent and less support from the central government, Semarang City Government remains committed to implementing accrual accounting. Though not require implementing legislation accrual and no other Local Government implements up to this time (2014). Because of complicated and complex accrual accounting, IFAC stated the importance of "political commitment" and "commitment of central entities and key officials" in order to transition to accrual implementation can be carried out well (IFAC, 2003: 34). Commitment factor is also expressed by Adil Najam (1995) as one of the variables that affect the implementation of the policy. Mazmanian and Sabatier expressed commitment and leadership skill of implementing officials as intervening variable in implementation model (1983).

Commitment of Semarang Mayor to implement accrual basis in order to be transparent and accountable in local government financial management as implemented in the commercial sector (private) becomes an important aspect in implementation of local government financial policy.

C. INNOVATION AND ATTITUDE OF THE LOCAL GOVERNMENT STAFFS

Semarang Mayor's committed to continue to implement accrual accounting supported by the staff of Semarang Government. Guidelines for the implementation of accrual accounting which is not prepared by the Central Government and the local financial management regulations which are not clear do not support the practice of accrual. It encourages Semarang City Government to formulate internal regulations in the form of local regulation, Mayor Regulation , SOPs and informal regulations which are simple and clear but not break the rules on it so as to produce the financial data for the implementation of accrual accounting. Semarang City Government also initiated consultations with the competent parties, follow the auditor's recommendations of the problems found in the audit of the financial statements and provide training to increase employee competence also develop a better accounting information system as accrual need.

Edwards III (1980) stated that the government bureaucratic agencies have different characteristics in a tendency among bureaucrats implementing a more homogeneous and have the same thoughts. What are the policy leaders of the organization will be adhered to. Executive staff sometimes overrides the implementation of policies set by higher authorities because implementers tend to prioritize the interests of their organization. The intensity of the attitude of the staff implementing tendency will affect policy implementation. The executor which has a negative choice may cause a stand against the objectives of the policy. They will be nice means there was support of implementing the policies whereby they would tend to implement policies in accordance with the desired constituent policy. Minimal support of the policy would give impact of errors and deviations between the planned implemented.

The attitude of the staffs of Semarang City Government is reinforced with the Mayor's commitment to encourage more effective implementation of accrual accounting so that staffs develop innovations and initiate actions to solve the problems in implementation.

D. ATTITUDES OF THE EXTERNAL PARTIES OF LOCAL GOVERNMENT

The commitment of Mayor of Semarang City Government supported by the executive staffs encourages the support of external Semarang City Government. They are the legislative (DPRD), BPK as government external auditors, academics, KSAP (accounting standard setter) and IPSASB (International Public Sector Accounting Standards Board). Legislature monitor the implementation of accrual, BPK provides recommendations on the audit findings, academic and KSAP giving advice while IPSASB through the provision of consultation and input in Semarang City Government to face the difficulties in implementing the accrual accounting basis. In addition, IPSASB provides grants for the cost of technical training (on the job training) for local government in Indonesia about how to implement the accrual accounting basis in Semarang City Government.

The following institutional and professional arrangements would greatly facilitate a move to an accrual accounting framework: a well-established and regulated national professional accounting body; a well functioning supreme audit institution; effective parliamentary public accounts committees; a national valuation office (or private sector valuation experts) to assist with valuation of assets; and an actuarial institution to assist with valuation of employee and social policy liabilities (Khan and Mayes, 2007: 14).

The support of external Semarang City Government encourages commitment of Semarang City Government to continue implementing accrual based accounting althought often finds problems and implementation of accrual accounting is more effectively.

5. CONCLUSIONS AND RECOMMENDATIONS

1. SAP accrual based is a complex policy and need technical regulations to communicate the policy to the implementers especially in local governments. Implementation of the policies which are not well communicated by policy makers (in central government) to implementers (in local government) whereby the policy is not communicated clearly and consistently will be effective if:
   a. Leadership has a policy implementing initiatives to implement policy driven conformity with its interests
   b. The commitment of the leadership of implementing policies encourage good attitude of staff implementers to comply with the policy
   c. The support attitude of the leadership and staff implementing policies encourage an innovative attitude to resolve unclear and inconsistent communication policy and lack in resources support
   d. The commitment of the leadership and staff implementing attitudes that support the implementation policies encourage the emergence of support from external parties.
2. The theoretical implication of this study is further explained the importance of the implementation phase of the policy which in the past was considered less important than the policy formulation phase. This study also complements the definition of policy implementation that has been defined by the experts by adding the initiative stage of implementer.

6. LIMITATIONS

This study contains limitations i.e. analyzing the less impact of the implementation of accrual accounting basis for transparency and accountability in particular the eradication of corruption in local government and this study is only a case study in a local government (only one local government in Indonesia has implemented accrual accounting basis now) while there are 529 local governments in Indonesia. Future studies are expected to be able to accommodate it.

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HUMAN RESOURCE (HR) ANALYTICS: EMERGING TREND IN HRM (HRM)

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ABSTRACT
HR function is recognised as a strategic partner of large corporations. To be a consistent strategic partner, HR analysis can provide direction to HR actions. But often it is noticed that HR lacks data based decision-making and analytic capability needed to influence strategies. It was in 1978 that Dr. Jac Fitz-enz proposed the idea of developing metrics that can measure the impact of HR activities on organisation's bottom line and referred the concept as HR analytics. HR analytics refer to the fusion of quantitative and qualitative data and information to have an insight and decision making support to the management of people in organisations. Its use has now become an emerging trend among the organisations that are interested in leveraging on their human capital. The paper is divided into four sections to have an absolute understanding of HR analytics. Firstly, the paper introduces the concept and history of HR analytics. Secondly, the paper identifies various functions of HRM --- Training and Development, Employment, Remuneration, Performance Appraisal, Separation and Talent Management/Succession Planning where HR analytics can be used and the purpose for which they can be used. Thirdly, the paper explains the roadmap of conducting HR analytics. The roadmap consists of five-step process: (a) Defining objectives of HR analytics (b) Data collection (c) Assessment of HR metrics (d) Decision making stage and (e) Alteration in decision. Lastly, the paper comes around the future of HR analytics--- Predictive HR analytics. While HR analytics are reactive in nature, Predictive HR analytics is proactive.

KEYWORDS
Human Capital, Human Resource Analytics, Human Resource Management, Predictive HR Analytics, Succession Planning.

I. INTRODUCTION

EVOLUTION OF HR ANALYTICS

The role of HR is critical in enabling the organisation to effectively deal with external environment challenges; the HRM function is being emerged as a strategic partner of large corporations in formulation of organisation's strategies and in the implementation of such strategies through human resource planning, training, employment, appraisal and rewarding of personnel. Recent researches propose, however, that HR is not making much advancement toward becoming a strategic partner in spite of the belief by HR professionals that it should (Lawler & Mohrman, 2003a; 2003b). The reason behind this shortfall is that HR lacks the nature of being analytic and lacks data-based decision-making competence, needed to influence any business strategy. This situation is primarily because HRM as a discipline has failed to develop the right metrics and analytic models. When it comes to Finance, Marketing, and Operations department in the organisations, they have the constructive evidence of their contribution towards organisational profitability such as profit and loss statement, sales report, balance sheet, etc. HRM also often fails to establish its relationship with effectiveness of organisation.

According to a Workforce Management article published in 2004, "In 1978—in this publication—Jac Fitz-enz proposed a radical, anti-establishment idea. Human resources activities and their impact on the bottom line could—and should—be measured. The reaction was apathy, disagreement and disbelief" (Caudron, 2004). Dr. Jac Fitz-enz dedicated his major part of life in quantifying the effectiveness of HRM function and enhances its reputation from 'a function that creates cost' to 'a function that contributes to profitability'.

These efforts began from budding fundamental details --- defining HR metrics such as hiring, staffing, compensation and retention. This lead to data collection that was comparable across organisations resulting into benchmarks of HR metrics. Major research work on HR metrics between the 1980s and 1990s was then devoted towards refining and improving the benchmarks of HR metrics. This benchmarking enabled organisations to gain competitive advantage through their human resources. But these benchmarks also created a detrimental effect that organisations start believing in 'one solution for all problems' notion. Organisations thought that just by imitating their competitors on some HR metrics, there job was done.

But this situation took a drastic turn in the last decade with the introduction of Human Resource Information System (HRIS) which not only provided organisations with data but also with decision- making mechanisms. This convergence of HR metrics and HRIS created new horizons for leveraging on HR.

CONCEPT OF HR ANALYTICS

HR analytics refer to the fusion of quantitative and qualitative data and information to have an insight and decision making support to the management of people in organisations. Its use has now become an emerging trend among the organisations that are interested in leveraging on their human capital.

The executives of a very renowned company, KPMG, defined HR analytics as "the application of statistical techniques (for example, factor analysis, regression and correlation) and the synthesis of multiple sources to create meaningful insights – for example, employee retention in office X is driven by factors Y and Z. Similarly, various authors and philosophers tried to define the term 'HR analytics' from their perception. A summary of such viewpoints and definition based on those viewpoints are presented in Table 1.

TABLE 1: VARIOUS DEFINITIONS OF HR ANALYTICS

HR Analytics Viewed as	Definitions
Process	Systematically reporting on a range of HR metrics--- hiring, staffing, compensation and retention.
Tool for Comparison	Benchmarking on HR metrics and comparing the components for implicit and explicit purposes.
Predictive Model	Provides answers to 'What if' scenarios.
Performance Driver	The application of a methodology and integrated process for improving the quality of people-related decisions for the purpose of improving individual and/or organizational performance (Bassi, et.al., 2010).
Talent Analytics	Range of applications from simplest human-capital facts to most sophisticated analytics that help optimize the talent supply chain (Davenport, et.al., 2010).

HR analytics is better understood when we categorise the HR metrics. Organisations need to collect data on three types of HR metrics to better understand and evaluate HR actions, HRM based strategies and finally organisational performance. They are efficiency, effectiveness, and impact (Boudreau & Ramstad, 2003a).

The first type is 'efficiency HR metrics'. These metrics attempts to answer the following question: 'Does HR functions contribute to organisational bottom line?' Productivity, HR headcount ratios, time to fill open positions, and administrative cost per employee are some examples of efficiency HR metrics. The second type of HR metrics is effectiveness, which focuses on whether HR programs and practices have the intended outcome on the talent pools toward which they are directed. The third and final type is 'impact HR metric'. These metrics concerns it with optimizing the capabilities and the core competencies of the organisation that can be collected in order to measure the impact of HR programs and practices (Lawler, 2003).

II. HRM FUNCTIONS

This section of paper recognizes various roles of HRM --- Employment, Training and Development, Remuneration, Performance Appraisal, Talent Management/Succession Planning and Separation where HR analytics can be used and the purpose for which they can be used.

EMPLOYMENT

Employment includes various other functions such as recruitment, selection, placement, etc. of personnel. The core of successful hiring at any level is to find right candidate with right qualifications for vacant position at the right time. Conventionally, when HR comes across a potential candidate, it collects the relevant historic data and makes the best possible judgment based on that. For example, collected data may include requirements for the position, candidate's qualifications, previous performance and exchanges during the interview process and reference checks. But in today's dynamic business environment, can organisations really afford to rely on subjective judgements of managers.

Here comes the HR analytics in picture. By taking into account data that are instinctively obvious – resumes, job descriptions, references, relevant experience and interviews – and some that may not be so obvious, mathematical algorithms can be used to answer questions about the suitability of the candidate for the vacant position. Organisations may use HR analytics to answer the following questions:

a) Will the selected source of recruitment create the pool of potential candidates for screening?
b) Does the candidate possess Knowledge, Skills and Attitude (KSAs) matches with job specification?
c) Is the candidate interested in the job being offered to him/her?
d) What is the probability of success of the candidate on the job position?
e) How much time the candidate will require to be successful on the job?

TRAINING AND DEVELOPMENT

The training and development function identifies and fills the capability gaps which employment function was not able close. This function is considered to be the most crucial sub-part of HRM that requires quantitative data-based evaluation. Whenever HR personnel approaches management with intervention plans, they often face difficulty in explaining the impact of interventions on organisation's bottom line. Top management demands evidence that training departments are contributing positively to the bottom line. The most renowned model of evaluation of training programs, Kirkpatrick model, takes into account outcomes such as reaction, learning, behaviour and organisational results. Out of these outcomes only the last one 'organisation results' deals with quantitative data and all other outcomes still includes subjectivity.

HR analytics attempts to answer the following questions frequently raised by management on training and Human Resource Development department of the organisation:

a) What interventions would have the greatest impact on employee effectiveness?
b) What interventions would help a particular problem?
c) What was the impact of a certain training intervention?
d) Which of our training interventions have the greatest impact on the productivity?

REMUNERATION

Traditionally, employers decide on the remuneration at their organisation. They go through the process of job evaluation and ends up with certain ranges, place employees in those ranges, then appraise their performance and much more. But the critical area that has not receive due attention in this process is to stepping back and try to evaluate the remuneration program so implemented. In the 21^{st} century, remuneration is just not based on the productivity of employees but also covers motivation, employee capabilities and retention (Levenson, 2012). Remuneration is nowadays believed to represents the potential of an employee rather than just being a figure that compensates for employees' services. The remuneration program is essentially an instrument in the hands of employer to reinforce employee behaviour. HR analytics assists managers in deciding the remuneration of employees based on various factors but also assess the effectiveness of the remuneration system. The following list of questions that could find their answers in HR analytics is not exhaustive:

a) What should be the determinants of bonus?
b) What should be the determinants of pay?
c) Does the existing remuneration program affects employees satisfaction and morale?
d) Does your remuneration program is better than that of your competitors'?
e) Is your remuneration program just and fair?
f) Is your remuneration program attracting talent in the industry?

PERFORMANCE APPRAISAL

The traditional methods of performance appraisal such as ranking, field review, critical incidents etc. are all trait-oriented. Evaluation of employees is done on the basis of benchmarks of personal traits. On the other hand, there are modern methods such as Management by Objectives (MBO) and Behaviourally Anchored Rating Scales (BARS) which represents result- oriented appraisal. These methods are repeatedly criticised and scrutinised as they are being open to interpretation and opinion. The most analytic method by far for appraising performance is Robert and Kaplans's Balanced Scorecard. This strategic performance management system measures performance from four 'balanced' perspectives: *Financial Perspective, Customer Perspective, Internal Business Process and Learning and Innovation.* These perspectives provide responds to following questions:

a) Does employees' performance results into economic consequences?
b) What employee characteristics drive customer satisfaction?
c) Are employees contributing to critical business processes?
d) Do the employees have potential for better performance?

TALENT MANAGEMENT/SUCCESSION PLANNING

Performance appraisal is usually the first step of talent management as it segregates performers from non-performers. Next comes the future of employees in the organisation. Many organisations that have a formal system of talent recognition use assessment centers to suggest scenarios that determine success in the next role. In a world that is rapidly changing, is it worth betting on employees based on the assumptions about future roles? If someone is a poor performer in the current role but has very healthy relationship with his/her supervisor, then the employee may have elevated chances for being promoted and vice-versa. One can never be sure of what an employee can perform in various scenarios. Further, there are always the odds of other employees (not selected for higher roles) resorting to management's decision. HR analytics would present a better understanding on:

a) Why someone is choosen for a future role while others are not?
b) What are the benchmarks to be eligible for various promotions?
c) What talent gaps are most critical to address?
d) Is there a need for role shift for any employee?

SEPERATION

Gone are the days when employees worked for decades for the same corporation. Today's organisations have learned to live with employee churn. Attrition in large organisations is considered an asset loss. Its an all-level issue that organisations would like to understand and get ahead of. Separation of productive employees characterizes an intense loss of human capital and severely blows the potential of future returns. Risk analysis on head count decline must be conducted with the same finical rigor as decisions on any other capital investment. Knowing the reasons behind attrition in an organisation can help organisations sustain and retain its pool of talented employees.

HR analytics provide answers on following separation related questions:

a) Why is turnover so much high?
b) What are the most important things organisations need to focus on to decrease regretted turnover?
c) How to retain high-potential employees?
d) Do organisations serve to HR needs?
e) What constitutes employee loyalty?

III. ROADMAP OF HR ANALYTICS

This section discusses in detail the five key stages in the analytics maturity diagnostic instrument that can be used by organisations as a self-assessment device as well as a roadmap for their data analytics journey. The roadmap constructed is here is not of definite steps but a generalization of various steps of the process of HR analytics.

(a) DEFINING OBJECTIVES OF HR ANALYTICS

An organisation must first determine the top most critical objectives based on its mission and vision statement, on which to focus. For example, objectives may be higher productivity, lower turnover and highest customer satisfaction are commonly desired objectives—but this is not the exhaustive list. Then based on the stated objectives appropriate questions can be framed whose answers will be found in the last stage of this process. This stage provides a direction to the process of HR analytics; why HR analytics is being conducted?

(b) DATA COLLECTION

Once an organisation understands what key HR-related issues it needs to solve, it must spot the relevant data requirements and develop consistent methods for collecting that data across organisational units, systems and geographies. Automated systems, powerful HRIS and other data collection methods give organisations access to abundant amount of HR data. While this type of data-gathering technology is extensively used to make the transactional processes of HR more competent, it has been under-utilized in applying quantitative analysis to HR initiatives.

FIGURE 1: ROADMAP OF HR ANALYTICS

(c) ASSESSMENT OF HR METRICS

It is necessary to determine the HR metrics that an organisation will use for decision-making purposes. This step gets into the details of the actual analysis process, but several measurement characteristics of each objective measure should be assessed such as frequency of measure, level of measure and owners of data. Table 2 shows some of the HR metrics frequently used for the analysis purpose.

TABLE 2: SOME IMPORTANT HR METRICS

Employment • External Hire Rate • Net Hire Ratio • Rehire Rate • Referral Rate • Average Interviews per Hire	**Training and Development** • Penetration Rate • Staff Ratio • Expense Rate • Average Class Size • E-Learning Abandonment Rate • Chanel Delivery Mix	**Remuneration** • Average Hourly Rate • Bonus Actual to Potential Rate • Compensation Satisfaction Index • Overtime Rate • Bonus Eligibility Rate
Performance Appraisal • Average Rating • Peer Review Rate • Self-Appraisal Rate • Performance-based Pay Differential • Upward Review Rate	**Talent Management** • Manager Instability Rate • Manager Quality Index • Successor Pool Coverage • Successor Pool Growth Rate	**Separation** • Involuntary Termination Rate • Voluntary Termination Rate • Average Termination Value

(d) DECISION MAKING STAGE

This stage of the process requires advanced statistical knowledge to link the data. Using structural equations modelling affords the ability to determine. With a strong analytic establishment, HR departments and their personnel can more effectively manage HR data and establish greater business background for human capital decisions. The ability to drill down into HR metrics can help expose a "root cause" and can help guide towards possible solutions. The final result generated from the data analysis step is a list of precedence that has data and analysis behind them to ensure an impact on the organisation. This helps HR professionals not only justify their decisions by thorough analysis, but also add more effectively to the formation of organisational strategy.

(e) ALTERATION IN DECISION

There always exists a chance (though a minor one) of a decision going wrong because HR analytics is based on data which is often approximated. Like other organisational decisions, managers should make slight adjustments to plan along the way based on continuous measurement results. However, it is not sensible to make frequent, extensive changes to the strategic focus of the decisions. Pick two to three critical areas and build action plans around those critical areas. Measure advancement against those plans two to three more times, and then re-calculate the dataset relations and re-prioritize.

IV. FUTURE OF HR ANALYTICS

HR analytics is an evidence-based system for improving individual and organisational performance by making better decisions on the HR side of the organisation. While HR analytics are reactive in nature--- management focuses on historic data to arrive at present day decisions, Predictive HR analytics is proactive in the sense that it does the work of projecting, predicting and forecasting. Conventional HR metrics that are frequently used in HR analytics by organisations today such as penetration rate, rehire rate, etc. However, these are only basic metrics that answer simple questions and at most show changes in organisational trends. These metrics can only answer questions of historical nature, while this is valuable it tender narrow predictive power into the future. As a result, organisations remain in a reactive cycle rather than using analytics as a proactive and strategic tool to make fact-based decision. Predictive analytics is a rising territory of HR analytics.

Predictive HR analytics states the future in terms of probabilities and while no application can predict the future with absolute assurance, its proponents argue that it helps management make decisions that minimize the risk and increase return on investment. Predictive HR analytics is becoming more and more tempting, permitting HR managers to be more strategic in predicting whether they will have enough resources next period, but also, have the right skills on their team four years down the road. Being an evolving phenomenon predictive HR analytics has much scope for future research purposes.

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SUSTAINABLE FINANCIAL INCLUSION: A CASE STUDY OF RANCHI DISTRICT

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ABSTRACT

Financial inclusion is a global issue. The U.N.O has also served that "most poor people in the world still lack access to sustainable financial services whether it is savings, credits or insurance" particularly in undeveloped and underdeveloped and developing nations financial inclusion is becoming a movement to provide financial services to weaker sections and low income groups at an affordable cost efforts are on at Government and Non – Government level to bring 135 million households in India under the fold of "Banking Habits". The resource of poor people living in villages of India desperately needs financial assistance with minimum hurdles and also with dignity. This will not only reduce vulnerability of households but will also promote economic growth and will alleviate and improve quality of people lives. Ranchi capital of Jharkhand but nearly ½ of its 25 lakh population is under below poverty line. People engaged in industries got good remuneration but dominated by poverty and illetracy.Economic condition of tribal's and ST/SC peoples are again more pathentic.The lead bank of this district are State Bank of India, NABARD, Bank of India and some sincere NGO's and Micro Financial Institutions are working for total financial inclusion but honest, speedy and sincere efforts are still appears to be in infancy stage.

KEYWORDS

Kisan Credit Card (KCC), General Credit Card (GCC), Self Help Group (SHG).

INTRODUCTION

Approx 2.9 billion excluded financial inclusion in the world. 560 million people in India excluded financial inclusion.457 million people in India live with a daily expense of US$ 1.25 per day. India is the 12th growing country in the world and in terms of purchasing power parity retains 4th position in the world. Reasons behind financial inclusion: - Scalable growth of middle class person's wealth. Globally recognized powers in the areas of telecommunication (information technology, Automotive, Life Sciences and even space technology).

Our country's growth challenged by the disproportimate distribution of income and a complete disparity between rich and poor. 10 percent population share country's 90 percent wealth in 2005, 42 percent of our population struggled to live on US $ 1.25 per day and even less than this amount. The uneven growth resulted in the exclusion of 51 percent of country's population (560 million) from formal sources of finance service, which is identified as the key sources of poverty, illiteracy, malnutrition, mortality and inadequate health care.

Financial inclusion is a priority for our country and other developing nation by policy development, regulatory reform and new funding vehicles. By 2015, Government of India set a target of 100 percent banking facility in India. These inclusions can be made through micro through micro credit, which helped hundreds of thousands people to reach out of their poverty.Dr. Mohammad Hussain is a Nobel Prize winner of 2006 who gave financial inclusion a global recognition by introducing micro credit to poor section. He was the founder of Gramin Bank in Bangladesh.

FINANCIAL INCLUSION

Financial inclusion is the process of ensuring fair timely and adequate access to financial services. These services are saving, credit payment and insurance services at an affordable cost in a fair and transparent manner by the mainstream institutional player. Financial inclusion is defined as the process of ensuring access to financial services timely and adequate credit where needed by vulnerable groups such as weaker groups- By C Rangrajan Committee. The issues of financial inclusion are emerging as the new paradigm of growth. Financial inclusion is at the vulnerable group of society. Thus financial inclusion is-

FI- Govt. agencies+ Banks + NFA+OFI+IT+MFI

- NFA= No Frill Account.
- OFI= Other Financial Institution.
- IT= Information Technology.
- MFI= Micro Financial Institute.

Financial inclusion is must for equal opportunities to all sections of people, inclusive growth social development and business opportunities to all sections of people, inclusive growth, social development and business opportunities to all sections of people. India's national mission is to open nearly 600 million new customers' bank account and services. So a variety of channels are in offing in unbanked areas. Reserve bank of India and Government of India plays an important role in promoting financial inclusion for economic growth to increase the banking penetration in the country. Before 1990, several initiatives has been undertaken which included creation of State Bank of India in 1955 , nationalization of commercial banks in 1969 and 1980 , initiating the lead bank scheme in 1970 these all are the big steps towards the expansion of financial inclusion. National Bank for Agriculture & rural Development (NABARD) was set up in 1982 mainly to provide refinance to the banks extending credit to agriculture, establishment of Regional Rural Banks (RRB) in 1975 are also a major step for the same aim which encourages branch expansion in rural areas, which also regulate interest rate for ceiling for credit in weaker sections.

NEED FOR FINANCIAL INCLUSION

Financial exclusion is a serious concern among the low income households as well as small business, mainly located in semi urban and rural areas. Basically, it is unavailability of any banking services to the people living in poverty. Financial exclusion is the lack of access by certain consumers to appropriate, low cost fair and safe financial products and services from mainstream provider. There are three types of exclusion:-

1. People who do not have any access to regulated financial system.
2. People who have limited access to banks and financial services.
3. Individuals who have unsuitable products.

MAJOR CAUSES FOR FINANCIAL INCLUSION

- Lack of banking facility in the locality (i.e. geographical exclusion including a rural-urban divide)
- Financial illiteracy.
- Cumbersome documentation and procedures.
- Languages.
- Feeling uncomfortable by a section of population in visiting bank branch.
- Lack of awareness and initial inhibition in approaching a formal institution.
- Distance from branch and branch timing.
- Fear of refusal.

Financial inclusion is channelized mainly to provide affordable banking services to marginal farmers, landless laborers, urban slum dwellers, migrant, self employed and unorganized sector enterprises, ethnic minorities and socially excluded groups, senior citizen and women etc.

OBJECTIVE OF THE STUDY

The objective of this paper is to examine critically success factors and challenges that exist in the delivery financial inclusion in country as a whole. Leanings were made from different case studies in India and other countries in the world. Interviews matters conducted with stakeholder responsible for policy development and delivery mechanism in India, including RBI and leading financial institutions. In exploring this financial inclusion , key objective is that policy makes financial institutions , technology providers can use to establish a collaborate framework or model to deliver Financial inclusion to the extent of the target set by the country. Confidence, security ease of use financial services overcoming poverty, illiteracy, malnutrition, illness, mortality and other exigencies. Mere emphasis on opening of no frill on opening of no frill accounts will not be a factor to financial inclusion. Step by step initiatives to be taken in getting successful inclusion. Our research work emphasizes first step is to educate financial literacy like opening an account. Make understanding of financial products. Concept and risk through information, instruction and objective advice. Develop the skills and confidence to become more aware of financial opportunities and risk. Emphasis is to be laid down on delivering financial services quick. Making cost at very low by improving technology in a wide geographical to a end of customers delivery loan and collect repayment. Direct delivery channel, self service technology, ATM, internet banking and mobile phone banking can be the factor in financial inclusion. MFI, SHG, WSHG along with private possible partner are the key services provider. Therefore these groups can better play a role in between marginal poor and financial institution. RRBs already overcoming key restraints in rural area by opening branches in remote rural areas but yet to reach outskirt areas. A multiple product access platform supported by formal educational easy to use technology well spread self service kiosk and suitable framework made by MFIs and SHGs can be sustainable factor in their issues. No frill accounts up to 2008 are about 15 million most of account remained closed due to financial illiteracy and the number of no frill account is just a target.

HYPOTHESIS

- RRBs and other financial institutions are the main source of sustainable financial inclusion.
- Proper initiatives are being taken by the government to promote financial inclusion.

METHODOLOGY

The study has been basically comprises analysis of secondary data and information from various financial institutions including block and panchayat level. Primary data and information will be collected through personal contact, structural questionnaires, and interviews. Personal observation will be signification statistical data chart and diagrams have necessary will be used.

SITUATION OF RANCHI

Ranchi is the capital of Indian State of Jharkhand and its second most populous city. Ranchi was the centre of Jharkhand movement which called for a separate state for tribal regions of South Bihar, Northern Odhisa, and Western West Bengal and Eastern area of what the present day Chhattisgarh. Ranchi lies at 23^0 21^lN 85^0 20 E. Its municipal area is 175.12 sq.km and its average elevation is 651met. above sea level. Ranchi is located in the Southern part of Chota Nagpur plateau, which is the eastern section of the Deccan Plateau. Ranchi is known as the city of Water falls because of numerous of waterfalls. Ranchi has a hilly topography and its dense tropical forest a combination that produces a relatively moderate climate compared to the rest of the State. During the period of British rule, it was accorded a hill station status, but right time rapid growth and industrialization have caused a marked changed in its market and its climate too. Ranchi district of Jharkhand though is called tourist capital of India but nearly ½ of its 25 lakhs populations, is under below poverty line. Ranchi district is one of the best oldest district of Jharkhand having 19 blocks, 256 Panchayats, Geographical area of 2886.89 sq KM

Number of villages 1348 out of which electrified villages are 368 and having population below poverty line is 125078. Being the oldest city and the capital of Jharkhand Ranchi is developing rapidly in all sectors.

The district is pre rained (rainfall-) and monocrop (paddy) having irrigated area of 1905 hectare our of the total) cultivated area of 37749 hectare. Agriculture and allied activities are major economic activities in the rural area of the district. The district is in terms of natural resources and number of industries but there is a wide disparity in the distribution of income. People who are engaged with industries and other works got good remuneration but people residing in rural areas depending on agriculture and allied activities do not get steady and regular income. Rural scenario is dominated by poverty and illiteracy.

POPULATION

Total Population of Ranchi District:	2,914,253
Urban Population:	1,257,335
Rural Population:	1,656,918

Thus the urban and semi urban population of district is about 52% of the total 25 lakhs. The district is called industrial district but most of its population living in villages deserve careful attention for inclusive growth through financial inclusion. The district credit plan 2011-2012 aimed at bringing the unprivileged people under banking net work for an inclusion and a uniform growth. Effects are being taken to small marginal BPL and women farmers through different financial institutions to reap the economic benefit of assured higher productivity. Besides this priorities were given to P.M.E-GP, G.G.S.Y, J.L.G, and KCC in general and dairy mushroom cultivation and sericulture in particular for achieving remunerative self employment project and to develop sustainable livelihood for lakhs of tribal and non tribal unbanked villagers of the district.

FINANCIAL INCLUSION: INDIA'S PERSPECTIVE

India has a long time, recognized the social and economic imperatives for inclusive financial inclusion and has made a huge contribution towards an economic development by finding innovative ways to empower the poor. Starting with the nationalization of banks, priority sector lending requirements for banks. In India Financial inclusion was first featured in 2005, when it launched by K. C. Chakarborthy, the chairman of Indian bank.Mangalam village became the first village in India where all households were provided with banking facilities. RBI has been undertaking financial inclusion initiatives in a mission mode through a combination of strategies ranging from provision of new products relaxation of regulatory guidelines and other supportive measures to achieve sustainable financial inclusion. Some of these steps are:

Facilitating no frills account and General Credit Card(GCC) for small deposits and credit norms were relaxed for people intending to open account with annual deposit of less than Rs. 50,000. In January 2006, RBI permitted commercial banks to make use of the services of non governmental organization (NGO/SHGs), micro financial institution and other civil society organization as intermediaries for providing financial and banking services. These intermediaries act as business correspondents by commercial banks. The bank directed the commercial banks in different regions to start a 100% financial inclusion campaign on a route finder basis. RBI vision for 2020 is to open nearly 600 million new customers' accounts and services them through a variety of channels by leveraging on Information Technology. However income saving and lack of bank branches in rural areas continue to be roadblock to financial inclusion in many states and there is also inadequate legal and financial structure.

Geographic and demographic penetration indicates the outreach of banking sector. Geographic penetration can be measured in terms of numbers of bank branches per 1000sq. km and number of ATMs per sq.km. On the other hand demographic penetration indicates number of bank branches per 100,000 sq km and number of ATMs per 100,000 sq km. This table represents the comparison of geographic and demographic penetration of banking services in various countries including India.

GEOGRAPHIC & DEMOGRAPHIC PENETRATION OF BANKING SERVICES IN SOME SELECTED COUNTRIES

	Geographic Penetration		Demographic Penetration	
Country	**No of banks branches/1000sqkm**	**No of ATM /1000sqkm**	**No of Bank Branches/1,00,000 People**	**No of ATM/1,00,000 People**
UK	45.16	104.66	18.35	42.45
INDIA	22.57	NA	6.30	NA
USA	9.81	38.43	30.46	120.94
MEXICO	4.09	3.72	14.59	17.82
BRAZIL	3.05	5.25	1.33	3.80
RUSSIA	0.19	0.53	2.24	6.28

Indian society does not place premium or individual initiative. They have succumbed to the beurocratic way of life which lays down in unequivocal term the clear role definition of each and every member of the institution. Leaving them little role to complain about:
Training- Skill- Policies = Knowledge.
Education-Values-Principle= Wisdom.
Know your Customer (KYC) is an obstacle for financial inclusion. Know Your Customer refers to relevant information from their clients for the purpose of doing business with them. The term is also used to refer to the bank regulation which governs these activities. Know Your Customer processes are also employed by companies of all sizes for the purpose of ensuring their agents etc. But RBI governor Raghuram Rajan ignored this KYC norm for keeping many Indians out of banking system and has proposed easing liability on banks for KYC violation in low-value account. RBI governor also said that the central bank has provided in-principle approval to a payment system which allows account holders to send fund to those without accounts ATMs on the basis of a code sent through a text message.

FACTORS OF FINANCIAL INCLUSION

FIG. 1: FINANCIAL INCLUSION (COMMUNITY INTERACTING THEREBY RESULTING IN ECONOMIC GROWTH)

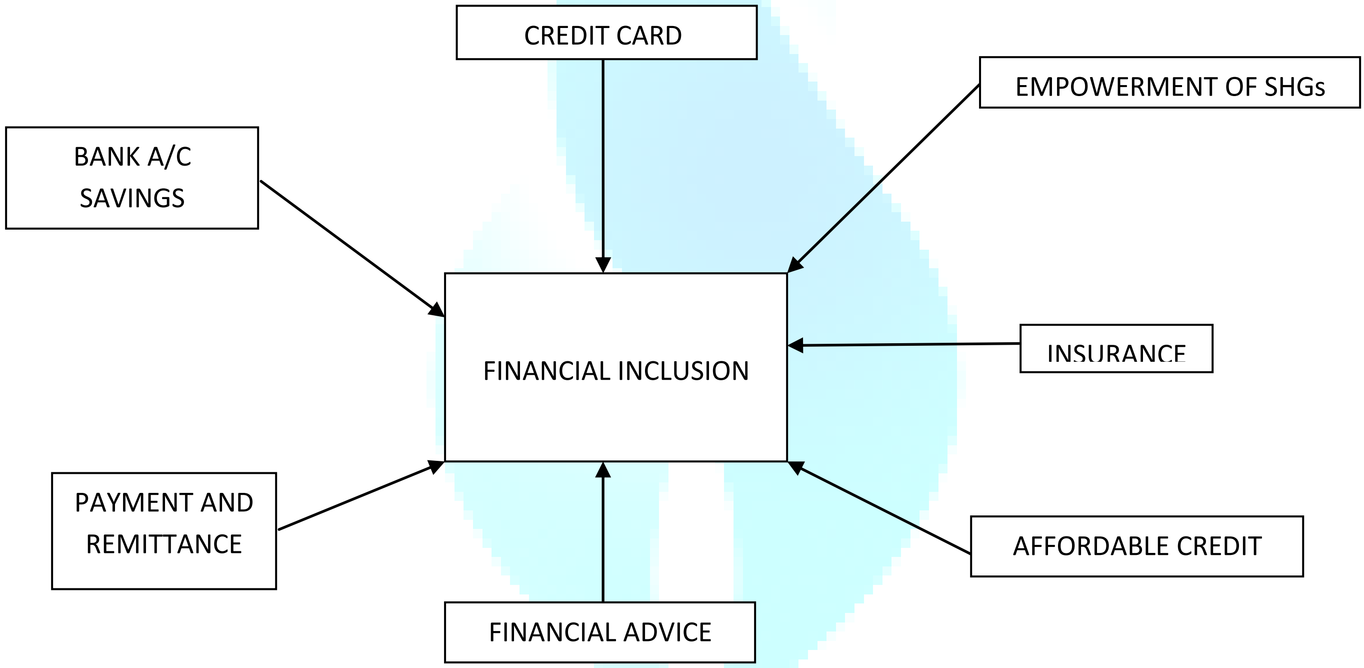
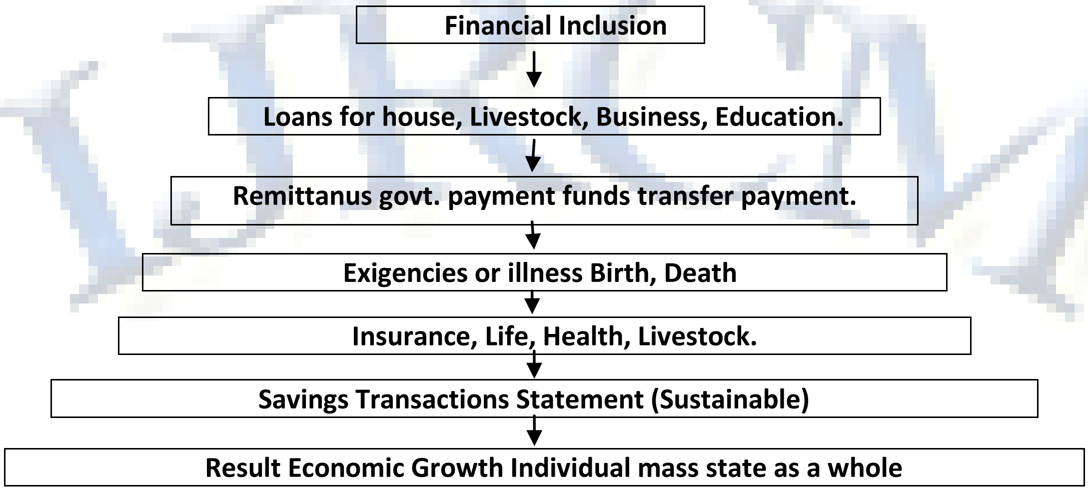


FIG. 2 : CYCLE OF FINANCIAL INCLUSION



There are a lot of SHG, WSHG whose approximate number are 3.37 million in India and number of registered Micro Finance Institution (MFI) is 750 in India. A multiple product access platform supported by formal education and easy to use technology well spread self service kiosk and suitable frame work made by MFIs and SHG can be the sustainable factor in their issue. No frill accounts up to 2008 are about 15 million. Most of the account remains closed due to financial illiteracy and the number of no frill account remained just a target. Two types of funds are allocated by Indian Government that comes to around US $ 125 million.

1. Financial Inclusion Fund :- Activities of Financial Inclusion Fund:-

- Training and capacity building of staff of cooperatives including primary agricultural cooperative society (PACS).
- Training and capacity building of the staff of RRBs / Business Correspondent (BC) / Business Facilitators (BF).
- Financial literacy centers by cooperatives banks and RRBs.
- Financial literacy campaign /program
- Project involving awareness at field level and support in opening of accounts for micro insurance / pension.
- Generic content to be developed literacy.

2. Financial Inclusion Technology:- Activities involved in Financial Inclusion Technology:-

- Support to weak state cooperative banks (SCB)/ Central Cooperative Banks (CCB) / Urban Cooperative Banks (UCB) for implementing core banking solution (CBS).
- Support to SCBs / District Central Cooperative Banks (DCCBS) /Regional Rural Banks (RRBs) for implementing Information and Communication Technology (ICT) based solution.
- Support for establishing ATMs for weak Cooperative banks /RRBs.
- ICT enabled Kisan Credit Card (KCC) for both RRBs and Cooperatives.
- On boarding of Aadhaar enabled payment system (AEPS) for RRBs / Cooperatives Banks.

FINANCIAL INCLUSION: PHASES & STEPS TAKEN BY GOVERNMENT

	Institutions	Year	OBJECTIVES
1.	Co-Operative Banks	1904	Basically to help poor people by opening branches in rural areas.
2.	Nationalized Banks	1969	To open public sector bank branches in rural areas to provide easily accessible bank facility.
3.	Lead Bank Scheme	1970	The lead bank was to act as consortium leader for coordinating the efforts of all credit institutions in each of the allotted district for expansion of branch banking facilities and for meeting the credit needs of the rural economy.
4.	Regional Rural Bank	1975	It is the combination of the local feel and the familiarity with rural problems which the cooperative possesses and the degree of business organization, ability to mobile deposit, access to central money market and modernized outlook which the commercial banks have. The institutions of Regional Rural Banks were created to meet the excess demand for institutional credit in the rural areas, particularly among the economically and socially marginalized sections.
5.	Micro Finance Institutions	1990	To provide micro credit to the poor to help them in earning their livelihood by self-employed.
6.	SHG	1992	Self Help Group (SHG)is a group of about 10-12 people usually women from a similar class and region, who come together to form saving and credit organization. They pooled financial resources to make small interest bearing loans.
7.	SHG bank Linkage		Through the SHG bank linkage program the RBI and NABARD have tried to promote relationship banking i.e. improving the existing relationship between the poor and the banker.
8.	Swarnjayanti Gram Swarojgar Yojna	1999	SGSY is a holistic scheme covering all aspect of self employed such as organization of the poor into self help group, training, credit, technology, infrastructure and marketing. The scheme is funded by financial institutions , Panchayat Raj Institutions, District Rural Development Agencies(DRDA),NGOs
9.	Committee of Financial Institution	2006	Allowing the use of intermediaries for providing banking and financial services through such policies the RBI has tried to improve financial inclusion.
10.	Business Correspondents	2009	The RBI approved BC model to approach the interior where banks can't be operated. Business correspondent are intermediaries who carry out banking functions in village or areas where it is not possible to open a branch. These can be NGOs or individuals of villages who will work for spreading awareness of banking facilities and get stipulated remuneration for that

REGIONAL RURAL BANKS (RRBs):-Regional Rural Banks (RRBs) were established in 1975 under the provision of the ordinance promulgated on the 26^{th} September and followed by Regional Rural Banks Act, 1976with a view to develop the rural economy and to create a supplementary channel to the “Cooperative Credit Structure” with a view to enlarge institutional credit for rural and agriculture sector. The Government of India, the concerned State Government and the bank, which had sponsored the RRB contributed to the share capital of RRBs in the proportion of 50%, 15% and 35%, respectively. The area of operation of RRBs is limited to notified few districts in a state. The RRBs mobilize deposits primarily from rural/semi urban areas and provide loans and advances mostly to small and marginal farmers, agricultural laboures, rural artisans and other segments of priority sector.

ROLE OF REGIONAL RURAL BANKS IN FINANCIAL INCLUSION: - Regional Rural Banks (RRBs) were established in 1975 and were incorporated under the RRB Act, 1975. RRB is a commercial bank and is included under the second schedule to the RBI Act, 1934. Their branches are licensed by RBI under section 23 of Banking Regulation Act; 1949.The National Bank for Agriculture and Rural Development (NABARD) supervises them under section 35 of the banking regulation act, 1949 having concurrent powers with RBI. RRBs were originally established as a hybrid structure with the objective of combining the local feel of cooperative and the business acumen of commercial banks to exclusively cater to the credit needs of the rural poor. Established originally to drive the money lender “out of business” and bridge the capital gap unfilled by the rural cooperatives and commercial banks in rural areas. These banking institutions have expanded remarkably during the last decades. Since, the early 1990s RRBs are permitted to lend 60% of their loans to rural non poor's. These banks were set up with rural orientation having the benefit of low cost profile of cooperatives and at the same time benefitting from the professionalism and modernity of commercial banks. The weaker sections have been a target group for assistance in the multi agency approach. The Regional Rural Banks (RRBs) would be a model financial infrastructure for rural development with patronage and encouragement given by planner in the field. As the end of March 2012, there were 82 RRBs functioning in 26 states covering 638 districts in the country with a network of 16909 branches. Among the 82 RRBs, operating as schedule commercial banks within the framework of multi agency system.

CONCLUSION

A huge socioeconomic contrast seen as 300 million people are growing (middle earning) and 600 million people still live in extreme to moderate poverty. India's continued success and prosperity will largely be a measure of its inclusive development. However inclusive growth is challenged by such factors:-

- Smart Card.
- Point Of Service Device.
- Biometric Reader.
- Mobile Phone.
- Automatic Tellering Machine (ATM).
- Point of Service Terminal.

- **Technology Enablers:-**
- Biometric recognition.
- Interactive Voice Response Services (IVRS).
- Multilingual Software.
- Graphical User Interface. (GUI).
- Wireless Connectivity.
- Internet Connectivity.

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ANALYSIS OF WORK STRESS AMONG TEACHERS OF SELF FINANCING COLLEGES IN KOTTAYAM DISTRICT, KERALA

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ABSTRACT

The phenomenon of work stress among teachers of self financing colleges has been receiving increased global attention and concern in recent years. Teaching has now become a very demanding occupation with a lot of stresses for a teacher who has a lot of deadlines to meet and a lot of responsibilities to shoulder besides teaching a child what are in a text book. It is important to tackle the causes of stress in the workplace as stress at work can lead to problems for the individual, working relationships and the overall environment. These issues may include lowered self esteem and poor concentration skills for the employees. Managing stress in the workplace is therefore an essential part of both individual and it is institutional social responsibility also. The present study was undertaken to analyze the types of stress among the faculty members in self financing colleges in and around Kottayam district of Kerala state. The study aims at identifying the stress creators among the faculty members.

KEYWORDS

Institutional social responsibility, self esteem, Work stress.

INTRODUCTION

Considered from an individual's point of view, stress is our body's physical, mental and chemical reactions to circumstances that frighten, confuse, endanger or irritates one. If controlled, stress is friend that strengthens for the next encounter. If handled poorly, it becomes an enemy which can cause diseases like high blood pressure, ulcer, asthma and overactive thyroid. Stress is highly individualistic in nature. Some people have high tolerance for stress and thrive well in the face of several stressors in the environment. In fact some individuals will not perform well unless they experience a level of stress which activate and energize them to put forth their best effort. On the other hand some others have very low level of tolerance for stress and it will affect their work negatively. Teacher stress may be defined as an unpleasant feeling that teachers experience as a result of their work. Past research on work stress among lecturers has identified numerous sources and variables affecting stress levels. For example, researchers have consistently reported time pressure, high self expectations, and research and publication demands as significant sources of work stress. Empirical evidence has shown that teachers experiencing more stress were burned out. It was found that managing student misbehavior, teachers' appraisal by students, workload and time constraints were predictors of burnout. Role conflict, work overload, classroom climate and decision making are all organizational factors that contributed to teacher stress and eventual burnout. Therefore, it was expected that job stress will predict burnout.

SCOPE OF THE STUDY

The scope of the study has been limited to 30 college teachers of 3 self financing colleges in an around Kottayam district, Kerala.

OBJECTIVES OF THE STUDY

- To find out the major factors causing stress that affects the teachers in the college atmosphere.
- To check the physical and mental impact of stress on individual's productivity.
- To identify the various ways and techniques by which the college teachers manage stress.

RESEARCH METHODOLOGY

The study is based on primary data collected from persons belonging to different age groups having different genders. A total of 30 questionnaires were distributed to various teachers in Kottayam district.

RESULTS AND DISCUSSIONS

1. GENDER WISE CLASSIFICATION

TABLE 1: GENDER WISE CLASSIFICATION

GENDER	NUMBER OF RESPONDENTS	PERCENTAGE
Male	10	33
Female	20	67
TOTAL	30	100

Source: Primary Data

2. AGE WISE CLASSIFICATION

TABLE 2: AGE WISE CLASSIFICATION

AGE GROUP	NUMBER OF RESPONDENTS	PERCENTAGE
20-25	5	16
26-30	9	30
31-35	8	27
36 and above	8	27
TOTAL	30	100

Source: Primary data

3. MARITAL STATUS WISE CLASSIFICATION

TABLE 3: MARITAL STATUS WISE CLASSIFICATION

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE
Single	6	20
Married	24	80
TOTAL	30	100

Source: Primary data

4. EXPERIENCE WISE CLASSIFICATION

TABLE 4: EXPERIENCE WISE CLASSIFICATION

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE
0-5 years	12	40
5-10years	10	34
10-15years	5	16
More than 15 years	3	10
TOTAL	30	100

Source: Primary data

5. STRESS CREATING FACTORS

TABLE 5: STRESS CREATORS

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE
Job insecurity	4	14
Students misbehavior	5	16
Shortage of infrastructure	1	3
Absence of motivation	6	20
Work-home conflict	8	27
Additional duty	1	3
No factors	5	17
TOTAL	30	100

Source: Primary data

Among the total respondents, 27% are of the opinion that work-home conflict is a stress creating factor, 20% say that absence of motivation creates stress, 16% say that student misbehavior is a cause for stress, 14% say that job insecurity causes stress, 3 % say that additional duty is a stress creator, again 3% shortage of infrastructure causes stress and finally 17% of respondents say that none of the factors makes their job stressful.

6. PHYSICAL AND MENTAL IMPACT OF STRESS

TABLE 6: IMPACT OF STRESS

OPINION	NUMBER OF RESPONDENTS	PERCENTAGE
Psychological distress	3	10
Mood disturbance	10	34
Anxiety	3	10
Lowered morale	1	3
Depression	2	7
Fatigue	3	10
Back pain	3	10
Cardiovascular disease	-	-
No impact	5	16
TOTAL	30	100

Source: Primary data

Among the total respondents, 34% say that mood disturbance is an impact of stress, 10% say that they face psychological distress because of stress, 10% say that they face anxiety, 10% say they face fatigue, 10% say that they come across back pain due to stress, 7% say they encounter with depression and 3% say that they face lowered morale, 16% say that they have no impact caused by stress.

7. STRESS MANAGING TECHNIQUES

TABLE 7: TECHNIQUES ADOPTED TO MANAGE STRESS

OPINION	NUMBER OF RESPONDENTS	PERCENTAGE
Rest and coffee	13	44
Reading books	10	33
Yoga and exercise	4	14
Interaction with friends or colleagues	1	3
Taking a bath	1	3
Playing with children	1	3
TOTAL	30	100

Source: Primary data

Among the total respondents, 44% say that they manage stress by taking rest and coffee, 33% manage stress by reading books, 3% play with children to manage stress, 14% do yoga and exercise to cope with stress, 3% say that they interact with friends and colleagues to cope with stress and finally the rest 3% refresh themselves to cope with stress.

FINDINGS

- 27% of the college lecturers are of the opinion that work – home conflict is a major stress creating factor.
- 34% of the lecturers are of the opinion that one of the major impacts of stress on them is mood disturbance.
- Majority of the college lecturers said that they managed work stress by taking rest and coffee.
- 50% of the lecturers share the stress problems arising in the work place with family.

SUGGESTIONS

- Lecturers facing stress should share their ideas for managing stress with their management in order to help them to implement appropriate stress reduction programs.
- Additional research should be done. First, other areas negatively affected by stress should be studied to determine if stress affects other aspects of an individual's life. In addition, other factors should be examined to learn what the personal and work related causes and symptoms of stress are for an individual.
- Lecturers can exercise regularly and get enough sleep. Make time to enjoy an activity outside the work place.
- Maintain a positive attitude. This will make it easier to live and work with others. Learn about the various relaxation methods available to help ease the daily tensions.
- Do activities that help you feel relaxed and content (example: taking a brisk walk, stretching or imagining you're in a favorite place).

- The institution should offer various types of incentive awards which will motivate the lecturers to improve their performance and also reduce stress to a certain extent.

CONCLUSION

On the basis of the findings and suggestions drawn, several conclusions concerning the effects of stress on college teachers in self financing colleges can be drawn. The college teachers have a lot of work stress due to their work, student performance and absence of motivation from the employing institution. Majority of the teachers share their problems with family. The stress cannot be avoided, so it should be managed with the proper usage of management techniques. The college lecturers should make use of techniques for managing stress like yoga, meditation, listening to music, reading books and rest for stress management. The technique used depends upon their work schedule. Job satisfaction and productivity were indicated as two areas most affected by work related stress. Therefore, stress cannot be considered just as an individual issue because reduced job satisfaction and lower productivity has a direct effect on the institution as a whole. Work stress is a real challenge for college lecturers and their employing institution. As institution and their working environment transform, so do the kinds of stress problems that employees may face. It is important that your work place is being continuously monitored for stress problems. Further, it is not only important to identify stress problems and to deal with them but to promote healthy work and reduced harmful aspects of work. Work in itself can be a self – promoting activity as long as it takes place in a safe, developed and health – promoting environment.

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IMPACT OF FOREIGN INSTITUTIONAL INVESTMENT ON INDIAN STOCK MARKET WITH SPECIAL REFERENCE TO BSE

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ABSTRACT

Many developing countries, like India, restricted the flow of foreign capital till the early 1990s and depended on external aid and official development assistance. Later, most of the developing countries opened up their economies by dismantling capital controls with a view to attracting foreign capital, supplementing it with domestic capital to stimulate domestic growth and output. Since then, portfolio flows from foreign institutional investors (FII) have emerged as a major source of capital for emerging market economies (EMEs) such as Brazil, Russia, India, China and South Africa. Since the beginning of liberalization (1991) Foreign Institutional Investors (FII's) have gained a significant role in Indian stock markets. Global investors now ardently seek India as their preferred location for investment. The dawn of 21st century has shown the real dynamism of stock market and the various benchmarking of sensitivity index (Sensex) in terms of its highest peaks and sudden falls. In this context present paper examines the contribution of foreign institutional investment in sensitivity index (Sensex). It also attempts to understand the behavioral pattern of FII during the period of 2001 to 2013 and examine the volatility of BSE Sensex due to FII. The data for the study uses the information obtained from the secondary resources like website of BSE Sensex. We attempted to explain the impact of foreign institutional investment on stock market and Indian economy. Also attempts to present the correlation between FII and BSE Sensex by the Karl Pearson' Coefficient of correlation test.

KEYWORDS

BSE Sensex, Regulation Relating to FII Operation, Effect of FII on Indian Economy, FII (Foreign Institutional Investment).

INTRODUCTION

The term Foreign Institutional Investor is defined by SEBI as under: "Means an institution established or incorporated outside India which proposes to make investment in India in securities. Provided that a domestic asset management company or domestic portfolio manager who manages funds raised or collected or brought from outside India for investment in India on behalf of a sub-account, shall be deemed to be a Foreign Institutional Investor. "Foreign Investment refers to investments made by residents of a country in financial assets and production process of another country. Entities covered by the term 'FII' include "Overseas pension funds, mutual funds, investment trust, asset management company, nominee company, bank, institutional portfolio manager, university funds, endowments, foundations, charitable trusts, charitable societies etc. (fund having more than 20 investors with no single investor holding more than 10 per cent of the shares or units of the fund)" (GOI -2005). FIIs can invest their own funds as well as invest on behalf of their overseas clients registered as such with SEBI. These client accounts that the FII manages are known as 'sub-accounts'. The term is used most commonly in India to refer to outside companies investing in the financial markets of India. International institutional investors must register with Securities & Exchange Board of India (SEBI) to participate in the market. One of the major market regulations pertaining to FII involves placing limits on FII ownership in Indian companies. They actually evaluate the shares and deposits in a portfolio.

WHY FIIs ARE REQUIRED?

FIIs contribute to the foreign exchange inflow as the funds from multilateral finance institutions and FDI (Foreign direct investment) are insufficient. Following are the some advantages of FIIs.

- It lowers cost of capital, access to cheap global credit.
- It supplements domestic savings and investments.
- It leads to higher asset prices in the Indian market.
- And has also led to considerable amount of reforms in capital market and financial sector.

INVESTMENTS BY FIIs

There are generally two ways to invest for FIIs.

• **EQUITY INVESTMENT:** 100% investments could be in equity related instruments or up to 30% could be invested in debt instruments i.e.70 (Equity Instruments): 30 (Debt Instruments)

• **100% DEBT:** 100% investment has to be made in debt securities only.

EQUITY INVESTMENT ROUTE: In case of Equity route the FIIs can invest in the following Instruments:

A. Securities in the primary and secondary market including shares which are unlisted, listed or to be listed on a recognized stock exchange in India.
B. Units of schemes floated by the Unit Trust of India and other domestic mutual funds, whether listed or not.
C. Warrants.

100% DEBT ROUTE: In case of Debt Route the FIIs can invest in the following instruments:

A. Debentures (Non-Convertible Debentures, Partly Convertible Debentures etc.)
B. Bonds
C. Dated government securities
D. Treasury Bills
E. Other Debt Market Instruments

It should be noted that foreign companies and individuals are not be eligible to invest through the 100% debt route.

HISTORY OF FIIs

India opened its stock market to foreign investors in September 1992, and in 1993, received portfolio investment from foreigners in the form of foreign institutional investment in equities. This has become one of the main channels of FII in India for foreigners. Initially, there were terms and conditions which restricted many FIIs to invest in India. But in the course of time, in order to attract more investors, SEBI has simplified many terms such as:-

• The ceiling for overall investment of FII was increased 24% of the paid up capital of Indian company.
• Allowed foreign individuals and hedge funds to directly register as FII.
• Investment in government securities was increased to US$5 billion.
• Simplified registration norms.

REGULATION RELATING TO FII OPERATION

- Investment by FIIs is regulated under SEBI (FII) Regulations, 1995 and Regulation 5(2) of FEMA Notification No.20 dated May 3, 2000. SEBI acts as the nodal point in the entire process of FII registration.
- FIIs are required to apply to SEBI in a common application form in duplicate. A copy of the application form is sent by SEBI to RBI along with their 'No Objection' so as to enable RBI to grant necessary permission under FEMA.
- RBI approval under FEMA enables a FII to buy/sell securities on stock exchanges and open foreign currency and Indian Rupee accounts with a designated bank branch.
- FIIs are required to allocate their investment between equity and debt instruments in the ratio of 70:30. However, it is also possible for an FII to declare it a 100% debt FII in which case it can make its entire investment in debt instruments.
- All FIIs and their sub-accounts taken together cannot acquire more than 24% of the paid up capital of an Indian Company. Indian Companies can raise the above mentioned 24% ceiling to the sectoral Cap / Statutory Ceiling as applicable by passing a resolution by its Board of Directors followed by passing a Special Resolution to that effect by its General Body. Further, in 2008 amendments were made to attract more foreign investors to register with SEBI, these amendments are:
- The definition of "broad based fund" under the regulations was substantially widened allowing several more sub accounts and FIIs to register with SEBI.
- Several new categories of registration viz. sovereign wealth funds, foreign individual, foreign corporate etc. were introduced,
- Registration once granted to foreign investors was made permanent without a need to apply for renewal from time to time thereby substantially reducing the administrative burden,
- Also the application fee for foreign investors applying for registration has recently been reduced by 50% for FIIs and sub accounts also, institutional investors including FIIs and their sub-accounts have been allowed to undertake short-selling, lending and borrowing of Indian securities from February 1, 2008.

OBJECTIVES

- To study the behavioral pattern of FII in India during 2001 to 2013.
- To know the volatility of BSE Sensex due to FIIs.
- To find out the relationship between the FIIs investment and stock market.

REVIEW OF LITRATURE

1. Stanley Morgan (2002) has examined that FIIs have played a very important role in building up India's foreign exchange reserves, which have enabled a host of economic reforms. Secondly, FIIs are now important investors in the country's economic growth despite sluggish domestic sentiment. The Morgan Stanley report notes that FII strongly influence short-term market movements during bear markets. However, the correlation between returns and flows reduces during bull markets as other market participants raise their involvement reducing the influence of FIIs. Research made by Morgan Stanley shows that the correlation between foreign inflows and market returns is high during bear situation and weakens with strengthening equity prices due to increased participation by other players.
2. Agarwal, Chakrabarti et al (2003) have found in their research that the equity return has a significant and positive impact on the FII. But given the huge volume of investments, foreign investors could play a role of market makers and book their profits, i.e., they can buy financial assets when the prices are declining thereby jacking-up the asset prices and sell when the asset prices are increasing. Hence, there is a possibility of bi-directional relationship between FII and the equity returns.
3. P. Krishna Prasanna (2008) has examined the contribution of foreign institutional investment particularly among companies included in sensitivity index (Sensex) of Bombay Stock Exchange. Also examined is the relationship between foreign institutional investment and firm specific characteristics in terms of ownership structure, financial performance and stock performance. It is observed that foreign investors invested more in companies with a higher volume of shares owned by the general public. The promoters' holdings and the foreign investments are inversely related. Foreign investors choose the companies where family shareholding of promoters is not substantial. Among the financial performance variables the share returns and earnings per share are significant factors influencing their investment decision.
4. Gurucharan Singh (2004) highlighted that the securities market in India has come a long way in terms of infrastructure, adoption of best international practices and introduction of competition. Today, there is a need to review stock exchanges and improve the liquidity position of various scripts listed on them. A study conducted by the World Bank (1997) reports that stock market liquidity improved in those emerging economies that received higher foreign investments.
5. Anand Bansal and J.S. Pasricha (2009) studied the impact of market opening to FIIs on Indian stock market behaviour. They empirically analyze the change of market return and volatility after the entry of FIIs to Indian capital market and found that while there is no significant change in the Indian stock market average returns; volatility is significantly reduced after India unlocked its stock market to foreign investors. In the next section we are discussing the data sources and methodology of the study.
6. Kumar (2001) investigated the effects of FII inflows on the Indian stock market represented by the Sensex using monthly data from January 1993 to December 1997. Kumar (2001) inferred that FII investments are more driven by Fundamentals and they do not respond to short-term changes or technical position of the market. In testing whether Net FII Investment (NFI) has any impact on Sensex, a regression of NFI was estimated on lagged values of the first difference of NFI, first difference of Sensex and one lagged value of the error correction term (the residual obtained by estimating the regression between NFI and Sensex). The study concluded that Sensex causes NFI. Similarly, regression with Sensex as dependent variable showed that one month lag of NFI is significant, meaning that there is causality from FII to Sensex.

DISCUSSION

INFLUENCE OF FII ON INDIAN STOCK MARKET

Positive fundamentals combined with fast growing markets have made India an attractive destination for foreign institutional investors (FIIs). Portfolio investments brought in by FIIs have been the most dynamic source of capital to emerging markets in 1990s. At the same time there is unease over the volatility in foreign institutional investment flows and its impact on the Stock market and the Indian economy. Apart from the impact they create on the market, their holdings will influence firm performance. For instance, when foreign institutional investors reduced their holdings in Dr. Reddy's Lab by 7% to less than 18%, the company dropped from a high of around US$30 to the current level of below US$15. This 50% drop is apparently because of concerns about shrinking profit margins and financial performance. These instances made analysts to generally claim that foreign portfolio investment has a short term investment horizon. Growth is the only inclination for their investment.

Some major impact of FII on stock market:

• They increased depth and breadth of the market.

• They played major role in expanding securities business.

• Their policy on focusing on fundamentals of share had caused efficient pricing of share.

These impacts made the Indian stock market more attractive to FII & also domestic investors. The impact of FII is so high that whenever FII tend to withdraw the money from market, the domestic investors fearful and they also withdraw from market.

TABLE- 01: NET FII INVESTMENT (IN INR CRORES)

Financial Year	Equity	Debt	Net FII Investment (Equity+ Debt)
2000-01	10,207	-273	9,933
2001-02	8,072	690	8,763
2002-03	2,527	162	2,689
2003-04	39,960	5,805	45,765
2004-05	44,123	1,759	45,881
2005-06	48,801	-7,334	41,467
2006-07	25,236	5,605	30,840
2007-08	53,404	12,775	66,179
2008-09	-47,706	1,895	-45,811
2009-10	110,221	32,438	142,658
2010-11	110,121	36,317	146,438
2011-12	43,738	49,988	93,726
2012-13	140,033	28,334	168,367

This Table Shows Net Investment (Debt and Equity) of FIIs In India Over a Period of 13 Years (2000-01 To 2012-13).

GRAPH SHOWING TREND IN FII INVESTMENT

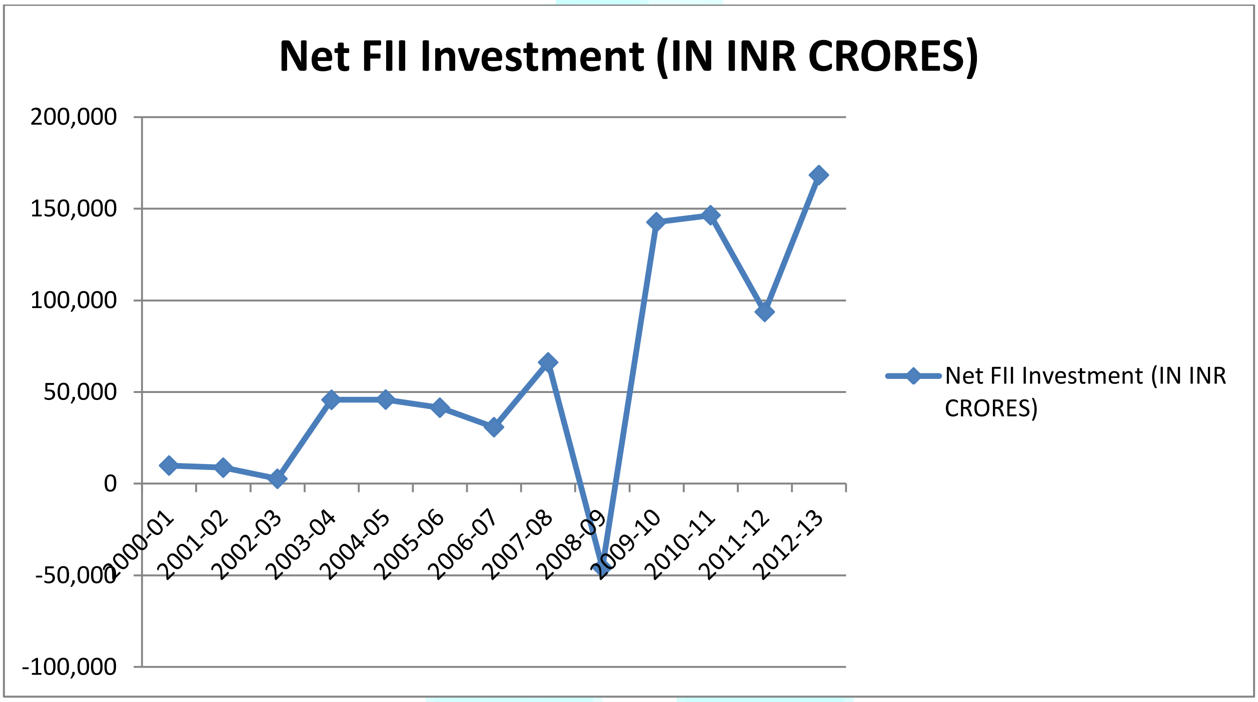

Table No. 1 Followed by respective graph shows that on an average the trend of investment made by FIIs has been in upward direction apart from a few little dips in 2002-03, 2006-07 and 2011-12. But there was a huge downfall in the investment in 2008-09 due to global economic crisis.

EFFECTS OF FIIs ON INDIAN ECONOMY

Let us study the positive and the negative side of this rise of investments by FIIs one by one.

POSITIVE IMPACT

It has been emphasized upon the fact that the stock market reforms like improve d market transparency, automation, dematerialization and regulations on reporting and

disclosure standards were initiated because of the presence of the FIIs. But FII flows can be considered both as the cause an d the effect of the stock market reforms. The market reforms were initiated because of the presence of the m and this in turn has led to increased flows.

1. ENHANCED FLOWS OF EQUITY CAPITAL

FIIs are well known for a greater appetite for equity than debt in their asset structure. For example, pension funds in the United Kingdom and United States h d 68 per cent and 64 per cent, respectively, of their portfolios in equity in 1998. Not only it can help in supplementing the domestic savings for the purpose of development projects like building economic and social infrastructure but can also help in growth of rate of investment, it boosts the production, employment and income of the host country.

2. MANAGING UNCERTAINTY AND CONTROLLING RISK

FIIs promote financial innovation and development of hedging instruments. These because of their interest in hedging risks, are known to have contributed to the development of zero-coupon bonds and index futures. FIIs not only enhance competition in financial markets, but also improve the alignment of asset prices to fundamentals. FIIs in particular are known to have good information and low transaction costs. By aligning asset prices closer to fundamentals, they stabilize markets. In addition, a variety of FIIs with a variety of risk-return preferences also help in dampening volatility.

3. IMPROVING CAPITAL MARKETS

FIIs as professional bodies of asset managers and financial analysts enhance competition and efficiency of financial markets. By increasing the availability of riskier long term capital for projects, and increasing firms' incentives to supply more information about them, the FIIs can help in the process of economic development.

4. IMPROVED CORPORATE GOVERNANCE

Good corporate governance is essential to overcome the principal-agent problem between share-holders and management. Information asymmetries and incomplete contracts between share-holders and management are at the root of the agency costs. Bad corporate governance makes equity finance a costly option. With boards often captured by managers or passive, ensuring the rights of shareholders is a problem that needs to be addressed efficiently in any economy. Incentives for shareholders to monitor firms and enforce their legal rights are limited and individuals with small share-holdings often do not address the issue since others can free-ride on their endeavor. FIIs constitute professional bodies of asset managers and financial analysts, who, by contributing to better understanding of firms' operations, improve corporate governance.

NEGATIVE IMPACT

If we see the market trends of past few recent years it is quite evident that Indian equity markets have become slaves of FIIs inflow and are dancing to their tune. And this dependence has to a great extent caused a lot of trouble for the Indian economy. Some of the factors are:

1. **POTENTIAL CAPITAL OUTFLOWS**

"Hot money" refers to funds that are controlled by investors who actively seek short-term returns. These investors scan the market for short-term, high interest rate investment opportunities. "Hot money" can have economic and financial repercussions on countries and banks. When money is injected into a country, the exchange rate for the country gaining the money strengthens, while the exchange rate for the country losing the money weakens. If money is withdrawn on short notice, the banking institution will experience a shortage of funds.

2. **INFLATION**

Huge amounts of FII fund inflow into the country creates a lot of demand for rupee, and the RBI pumps the amount of Rupee in the market as a result of demand created. This situation leads to excess liquidity thereby leading to inflation where too much money chases too few goods.

3. **PROBLEM TO SMALL INVESTORS**

The FIIs profit from investing in emerging financial stock markets. If the cap on FII is high then they can bring in huge amounts of funds in the country's stock markets and thus have great influence on the way the stock markets behaves, going up or down. The FII buying pushes the stocks up and their selling shows the stock market the downward path. This creates problems for the small retail investor, whose fortunes get driven by the actions of the large FIIs.

4. **ADVERSE IMPACT ON EXPORTS**

FII flows leading to appreciation of the currency may lead to the exports industry becoming uncompetitive due to the appreciation of the rupee.

BSE SENSEX AND FII INVESTMENT CORRELATION

Sensex is the commonly used name for the Bombay Stock Exchange Sensitive Index – an index Composed of 30 of the largest and most actively traded stocks on the Bombay Stock Exchange (BSE). The term FII is used most commonly in India to refer to outside companies investing in the financial markets of India. FII investment is frequently referred to as hot money for the reason that it can leave the country at the same speed at which it comes in. In country like India; statutory agencies like SEBI have prescribed norms to register FIIs and also to regulate such investments flowing in through FIIs.

TABLE- 02: RELATIONSHIP BSE SENSEX VALUE AND NET INVESTMENT OF FII (IN INR CRORES)

Year	Sensex Value (Closing Value of the year)	Net FII Investment (Equity+ Debt)
2001	3262	12494.8
2002	3373	3677.9
2003	5839	35153.8
2004	6603	42049.1
2005	9398	41663.5
2006	13787	40589.2
2007	20287	80914.8
2008	9647	-41215.5
2009	17465	87987.6
2010	20509	179674.6
2011	15455	39352.80
2012	19426	163350.1
2013	21170	62288

Source: The data presented above is compiled on the basis of reports submitted to SEBI by custodians and constitutes trades conducted by FIIs on and up to the previous trading day(s).

This Table Shows Relationship BSE Sensex Value and Net Investment of FIIs in India over a Period of 13 Years (2000-01 to 2012-13).

TABLE- 03: CORRELATION BETWEEN FIIS INVESTMENT & BSE SENSEX CORRELATION

		Sensex Value (Closing Value of the year)	Net FII Investment (Equity+ Debt)
Sensex Value (Closing Value of the year)	Pearson Correlation	1	**.712******
	Sig. (1-tailed)		.003
	N	13	13
Net FII Investment (Equity+ Debt)	Pearson Correlation	.712**	1
	Sig. (1-tailed)	.003	
	N	13	13
**. Correlation is significant at the 0.01 level (1-tailed).			

Source: Result of Karl Pearson's bivariate correlation analysis done with the help of SPSS 16.0.

The value of Karl Pearson co relation(r) is found to be +0.712. It means that there is high degree positive correlation between BSE Sensex and foreign institutional investment. (Pearson' correlation value is (be +0.712).

CONCLUSION

On the basis of above discussion and data analysis, it is clear that the FIIs are influencing the Sensex movement to a greater extent. Further it is evident that the Sensex has increased when there are positive inflows of FIIs and there were decrease in Sensex when there were negative FII inflows. The Pearson correlation values indicate positive correlation between the foreign institutional investments and the movement of Sensex (Pearson' correlation value is be + 0.712).

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A DISCOURSE ON CLASS ACTION SUITS

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ABSTRACT
The term "class action suit" is self explanatory. It is a lawsuit brought in action by a class of members. It reinforces the concept of 'unity in diversity'. The saga of class action suits originated in United States of America in 1938 and its discourse is still predominantly associated with United States. In India, such suits have somehow been provided for, under Consumer Protection Act' 1986; but have recently been included in Companies Act' 2013 to govern corporate sector. This new practice is welcomed wholeheartedly but it has its own issues, which need to be addressed. In this paper, an attempt is made to draw readers' attention to various such issues, merits and demerits associated with class action suits and provisions thereon.

KEYWORDS
call action suit, companies act.

1. INTRODUCTION
A class action suit is a suit wherein a group of persons sues another person; a group of persons sues another group of persons; or a person sues a group of persons. Class Action Suits were earlier undertaken in the name of group litigation. It originally started for consumers of goods and services, but we will try and focus our attention on corporate sector. The saga of class action suits originated in United States of America in 1938 and its discourse is still predominantly associated with United States. In India, such suits have somehow been provided for, under Consumer Protection Act' 1986; but have recently been included in Companies Act' 2013 to govern corporate sector. Firstly, let us discuss the provisions so provided under Companies Act' 2013 on class action suits, and then we will explain the merits, demerits and issues associated with class action suits.

1.1 SECTION 245 OF COMPANIES ACT' 2013

1.1.1 CLASS ACTION SUITS CAN BE FILED TO

245. (1) Such number of member or members, depositor or depositors or any class of them, as the case may be, as are indicated in sub-section (3) may, if they are of the opinion that the management or conduct of the affairs of the company are being conducted in a manner prejudicial to the interests of the company or its members or depositors, file an application before the Tribunal on behalf of the members or depositors for seeking all or any of the following orders, namely:—
(a) to restrain the company from committing an act which is ultra vires the articles or memorandum of the company;
(b) to restrain the company from committing breach of any provision of the company's memorandum or articles;
(c) to declare a resolution altering the memorandum or articles of the company as void if the resolution was passed by suppression of material facts or obtained by mis-statement to the members or depositors;
(d) to restrain the company and its directors from acting on such resolution;
(e) to restrain the company from doing an act which is contrary to the provisions of this Act or any other law for the time being in force;
(f) to restrain the company from taking action contrary to any resolution passed by the members;
(g) to claim damages or compensation or demand any other suitable action from or against—
(i) the company or its directors for any fraudulent, unlawful or wrongful act or omission or conduct or any likely act or omission or conduct on its or their part;
(ii) the auditor including audit firm of the company for any improper or misleading statement of particulars made in his audit report or for any fraudulent, unlawful or wrongful act or conduct; or
(iii) any expert or advisor or consultant or any other person for any incorrect or misleading statement made to the company or for any fraudulent, unlawful or wrongful act or conduct or any likely act or conduct on his part;
(h) to seek any other remedy as the Tribunal may deem fit.
(2) Where the members or depositors seek any damages or compensation or demand any other suitable action from or against an audit firm, the liability shall be of the firm as well as of each partner who was involved in making any improper or misleading statement of particulars in the audit report or who acted in a fraudulent, unlawful or wrongful manner.

1.1.2 MINIMUM NUMBER OF CLASS MEMBERS

(3) (i) The requisite number of members provided in sub-section (1) shall be as under:—
(a) in the case of a company having a share capital, not less than one hundred members of the company or not less than such percentage of the total number of its members as may be prescribed, whichever is less, or any member or members holding not less than such percentage of the issued share capital of the company as may be prescribed, subject to the condition that the applicant or applicants has or have paid all calls and other sums due on his or their shares;
(b) in the case of a company not having a share capital, not less than one-fifth of the total number of its members.
(ii) The requisite number of depositors provided in sub-section (1) shall not be less than one hundred depositors or not less than such percentage of the total number of depositors as may be prescribed, whichever is less, or any depositor or depositors to whom the company owes such percentage of total deposits of the company as may be prescribed.

1.1.3 JUDGING THE AUTHENTICITY AND VALIDITY OF SUIT

(4) In considering an application under sub-section (1), the Tribunal shall take into account, in particular—
(a) Whether the member or depositor is acting in good faith in making the application for seeking an order;
(b) any evidence before it as to the involvement of any person other than directors or officers of the company on any of the matters provided in clauses (a) to (f) of subsection *(I)*;
(c) whether the cause of action is one which the member or depositor could pursue in his own right rather than through an order under this section;
(d) any evidence before it as to the views of the members or depositors of the company who have no personal interest, direct or indirect, in the matter being proceeded under this section;
(e) where the cause of action is an act or omission, that is yet to occur, whether the act or omission could be, and in the circumstances would be likely to be –
- Authorised by the company before it occurs; or
- Ratified by the company after it occurs

(f) where the cause of action is an act or omission that has already occurred, whether the act or omission could be, and in the circumstances would be likely to be, ratified by the company.

1.1.4 OTHER RELATED FUNCTIONS OF TRIBUNAL

(5) If an application filed under sub-section (1) is admitted, then the Tribunal shall have regard to the following, namely:—

(a) public notice shall be served on admission of the application to all the members or depositors of the class in such manner as may be prescribed;

(b) all similar applications prevalent in any jurisdiction should be consolidated into a single application and the class members or depositors should be allowed to choose the lead applicant and in the event the members or depositors of the class are unable to come to a consensus, the Tribunal shall have the power to appoint a lead applicant, who shall be in charge of the proceedings from the applicant's side;

(c) two class action applications for the same cause of action shall not be allowed;

(d) the cost or expenses connected with the application for class action shall be defrayed by the company or any other person responsible for any oppressive act.

(6) Any order passed by the Tribunal shall be binding on the company and all its members, depositors and auditor including audit firm or expert or consultant or advisor or any other person associated with the company.

1.1.5 CONSEQUENCES FOR NON COMPLIANCE

(7) Any company which fails to comply with an order passed by the Tribunal under this section shall be punishable with fine which shall not be less than five lakh rupees but which may extend to twenty-five lakh rupees and every officer of the company who is in default shall be punishable with imprisonment for a term which may extend to three years and with fine which shall not be less than twenty-five thousand rupees but which may extend to one lakh rupees.

(8) Where any application filed before the Tribunal is found to be frivolous or vexatious, it shall, for reasons to be recorded in writing, reject the application and make an order that the applicant shall pay to the opposite party such cost, not exceeding one lakh rupees, as may be specified in the order.

(9) Nothing contained in this section shall apply to a banking company.

(10) Subject to the compliance of this section, an application may be filed or any other action may be taken under this section by any person, group of persons or any association of persons representing the persons affected by any act or omission, specified in sub-section (1).[1]

2. ARGUMENTS IN FAVOUR OF CLASS ACTION SUITS

The law and constitution of various countries guarantee various kinds of rights to their respective citizens. But these rights won't help until and unless citizens exercise them. It is well accepted that majority of persons hesitate (because of time, effort and money required in legislative procedure coupled with a conventional mindset that loss to the aggrieved would get larger than the final benefits and the perception that initial suffering is too petty to be a cause for driving a lawsuit) in filing the cases against any sort of injustice. But, if they can sue a party while in a group then the individual petty losses lump into a big amount, becoming a sufficient cause to drive the lawsuit against the wrongdoer and cost of litigation could be shared (economies of scale), and then the task gets enthusiastic and challenging (Alexander).

Similarly for companies, in case a public company collapses, loss to each individual shareholder might be too small to be worthy of a suit, but shareholders can form a class and sue the wrongdoer in a class, leading to justified worthiness.

Other less confident and sort of afraid class members can inconspicuously sit behind representative class members, thereby boosting former's confidence and willingness to fight for their rights.

In a class action suit, suit is filed by a class and compensation granted for damages accrues to all the class members. It becomes the duty of court to ensure that all the plaintiffs are equitably compensated. Also, it would lead to consistency in judgements for all the members, which one cannot guarantee, had the members filed the cases individually.

Also, it saves the time of judiciary by avoiding the necessity of repeating the same witnesses and issues (as the number of cases plummets).

Class action suits can be used for social policy reforms against tobacco companies, gun manufacturers, etc (Hensler). It can force product manufacturers to take into account the externalities. Externalities refer to the effects borne by the persons (society) other than parties directly associated with the product (buyer and seller). For example: Cigarettes; it is well known that lungs of persons around smokers deteriorate at the faster speed than of the smokers themselves.

Having discussed the arguments in favour of class action suits, now we come to the arguments against class action suits.

3. ARGYMENTS AGAINST CLASS ACTION SUITS

Sometimes it might get difficult to bring together more members into the class and even if so is achieved, total amount may still not be large enough to culminate into a satisfying decision to file a suit.

Often transaction costs exceed the benefits to class and society. Assessing the benefits and costs is also difficult (Hensler). Also, there may be clashes among the class members, undermining the effectiveness of the provision.

It is said that class action suits provide a platform to aggrieved persons to reimburse the vent of their grievances; it is believed that the whole class which has filed the suit benefits as a whole. But, this study of 2009 (LLP) showed:

A. in the number of cases, only lawyers enriched themselves in the process.

B. 14% of cases remained pending for four years.

C. Funds were delivered to miniscule percentages of the class like 0.000006%.

D. Some class action suits instead of providing payment to class members, settled on an agreement to pay to a charity. (LLP)

As per this study in Australia, on an average only 14 cases are filed every filed every year, thereby not meeting the expected outbreak of lawsuits after the enactment of the supporting provision. (CLASS ACTIONS IN AUSTRALIA, THE YEAR IN REVIEW, 2011)

4. CONCLUSION

Provision on Class Action Suit is a welcome move. Companies Act' 2013 has adequately provided for it. It not only includes basic provisions describing as to in which cases class action suit might be filed and consequences for non compliance, but it also has laid down the ways by which Tribunal can ensure that suit is not filed to serve vested interests.

There are various advantages associated with class action suits: they encourage the aggrieved individuals to register a lawsuit, which they might not file in isolation; they save the time of judiciary as the number of cases plummets; class action suits can even initiate social policy reforms, etc.

There are various limitations as well: it might not be possible to collect large number of members; benefits to class might exceed the costs incurred in terms of time, money and effort for electricity; there may be clashes among the members themselves; in number of cases, lawyers themselves at the expense of class members; a large number of cases remain pending; funds for compensation might remain restricted to few dominant members, etc.

Having concluded about the provisions, merits and demerits on class action suits, it can be said that it is a tool to be used ethically and with caution. Lot of literature will come up on this move, by researchers around the world, once Section 245 of Companies Act' 2013 gets implemented after Central Government's notification. Till then, government needs to make proper procedures through which class action suits could be filed and solved and also need to build up support programs for encouraging citizens to exercise their right, so as to have better governance throughout the country.

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