JOURNAL OF ECONOMICS AND BUSINESS RESEARCH

JOURNAL OF ECONOMICS AND BUSINESS RESEARCH

Volume XXII, No. 1/2016

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Building Industry Enterprises Logistic System according to their Life-cycle and Organizational Adaptation

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Abstract
This article presents a survey of the Ukrainian machinery-building industry enterprises performance in 2012-2014 due to the state of their logistic systems development and companies' life-cycle stage. The review of existing theoretical approaches shows the range of possible criteria for evaluation at each level of the industry, enterprise and product. The conducted research evaluates the Ukrainian machinery-building industry and the companies that create that potential. The peculiarities of the organizational adaptation of the above mentioned enterprises and the developed recommendations will help to establish an adaptive management and gain enterprises' market competitiveness.
Keywords: machinery-building industry, logistic system, organizational adaptation, company's life cycle

Introduction

Globalization and integration of separate domestic markets into the international common market give the companies chances to search for competitive advantage not only in technological or economic spheres, but in organizational as well. The organizational adaptation ability of an enterprise can become the main power of implementing company's successful market strategies. Enterprise's goals, objectives and tasks differ from one phase of its development to another. Nowadays, the Ukrainian machinery-building industry as a sector of the country's economy suffers from a lack of investments and technological innovations. Managerial approach to the industry's current situation may help to investigate and find the organizational solution that can improve economic performance, generally.

Research issue

The aim of this article is to investigate the Ukrainian machinery-building industry enterprises in order to develop adaptive management recommendations to improve their competitiveness, by evaluating their logistic systems conditions and taking into consideration their life-cycle stage.

Literature review

There are several conceptions of the life-cycle approaches in the scientific literature. Different authors in different times took conclusions about the numbers of stages, their names, the criteria for assessment and the key factors of development. Three levels of analysis are presented by different authors. Generally, they vary from the controlled objective point of view, even if it might be an industry, an enterprise or a product (brand). The frequently mentioned classification and common-spread models in theory are summed up in table no.1.

There are some innovative crucial points for the life-cycle theory. From the point of view of Shirokova G. V. (2008), company's life-cycle stages are not consequential from one to another by time and development factors. It depends from the company's ability to adapt and react to market changes. So, adaptation can be used as a tool in order to endure one phase or quickly pass to another. One more significant feature is that company never plans its decline or liquidation, so after the maturity stage the renovations are needed to skip one phase and go on with new product launching or new structure creation.

Table no. 1. Life-cycle model approaches (Matushenko, 2010)

Implementa-tion level	Development key-factor	Name and number of stages	Evaluation criterion	Author
Industry	Barriers to entry	Stages (4): emergent, growth, mature and declining market	Competitiveness dynamics	M. Porter
	Technology improvement	Phases (3) of function; reliability; comfort	Consumers orientation	J. Moor
Enterprise	Organizational history – evolution and revolution inside the company	Phases (5): creativity, direction, delegation, coordination and collaboration	Growth rate of the industry, age of organization, size of organization, stage of evolution, stage of revolution	L.E. Greiner
Product	Consumer needs	Stages (4): launching, growth, maturity and liquidation	Market sales	T. Levitt

According to Morris et al. (1999), adaptation will be more beneficial in turbulent industries, than in stable industries. So, the stage of industry development has to be taken into consideration as well. Generally, four adaptation moderators can be observed in the scientific literature. The first adaptation intensity and necessity moderator is the maturity of the industry sector (mature, growth or emergent market). Second is the capital intensity (high and less capital intensive industries); third are the environmental circumstances changes and the fourth are the technical advance of an industry. (P. Andries, K. Debackere, 2007)

The main patterns of the company's organizational adaptation by its managerial performance are shown in the table no.2.

Table no. 2. Organizational design and company's strategic adaptation tiers (Carley, 1997)

Criteria - Approaches	Focus	Cost function	Types of strategic adaptation	Definition	Organizational designs dimensions
Organizational learning	Individual	Maximizing decision accuracy	Agent change	Individual agents could be hired or fired	Size of organization
Monitoring	Organization	Maximizing the number of widgets produced	Linkage change	Individual could be reassigned to new managers or tasks could be reengineered and so components of the task are assigned to different agents	Density
Planning	Intelligent agents	Minimizing salary	General change	Both agents and linkages	Number of isolates
Socially shared cognition					Number of decision factors
Evolution of industry					Number of agents
					Flexibility
					Amount of training the agents have

According to table no. 2, the focus of company's adaptation vary from socially-shared cognition on the level of society (Romanelli E., 1991); planning company's development on enterprise strategic level; implanting the intelligent agents (Holland J.H. et al., 1991) that would provoke market changes on tactical level to the everyday monitoring of internal and external flows (Ouksel A. et al., 1995) of enterprise on operational level.

Carley K. M. (1997) stated three types of enterprise strategic adaptation: agent change, linkage change and general change. They can be used due to the size of organization and the level of development of the mentioned moderators. The results of the research claimed that individuals who join large organizations are more likely to remain with the organization longer and to see the organization grow around them. As organizations become more successful, the individuals within the organization will come to interact less with other individuals within the organization (density decrease). Moreover, organizations that are increasingly successful will come to overlook fewer decision factors. (Carley, 1997)

Due to the survey of P. Andries and K. Debackere (2007), their findings suggested that the adaptation is beneficial in immature, capital-intensive and high-velocity industries. Adaptation appears detrimental in mature, stable industries. Adaptation has a more positive effect on survival. And to sum up, the effect of adaptation on survival is highly company and sector specific.

In order not only to have the theoretical view, but the possibility to investigate industry and enterprises states, the methods of actual life-cycle estimation should be taken into consideration as well. Matushenko (2010) mentioned five different approaches: method of building costs function - building correlation dependence from the company's revenue and total costs; method of turnover analysis - estimation of company's speed of turnover changes, break-even-point analysis; variance (dispersion) analysis – F - criterion calculation and comparison with table meaning; least square method - finding dependences between company's return and time, and financial indicators method based on the company's performance analyses.

Research methodology and the results of the study

Based on the presented literature review, the purpose of the research of the Ukrainian machinery-building industry companies' was

to find the resolution to increase the Ukrainian economy efficiency and the domestic companies' competitiveness.

Table no. 3. Ukrainian machinery-building industry data for 2012-2014 according to the Ukrainian companies economic activities classification (State statistics Service of Ukraine)

Industry	*Volume of sold production (mln, hryvnas)*	*Industry production Index (%)*		*Summarized financial result before taxation (mln, hryvnas)*		*Net profit of enterprises that gained positive financial results (mln, hryvnas)*	*Share of enterprises that got financial losses during analyzed period (%)*	
	2014	*2013/ 2012*	*2014/ 2013*	*2013*	*2014*	*2014*	*2013*	*2014*
Machi-nery - building	**93986.2**	**86.4**	**78.7**	**4986.5**	**-20045.0**	**8751.7**	**32.5**	**41.0**
Personal computers, electronic and optic products production	7212.3	86.0	77.3	145.0	-1525.0	426.0	21.5	33.7
Electric machinery production	19306.4	91.1	100.1	736.9	-4487.1	1183.7	31.8	38.6
Machinery and equipment production that haven't been classified to other groups	29647.9	93.5	87.1	1200.1	-3490.7	3441.7	38.0	42.7
Vehicles, trailers and other transport production	37819.6	79.8	64.3	2904.5	-10542.2	3700.3	27.5	43.8

Table no. 3 presents data regarding the machinery-building industry indicators that states general declining of industry production index. The structure of produced items shows the maximum output in vehicles, trailers and other transport production (3700.3 mln. hryvnas) in 2014. At the same moment the share of enterprises that got financial losses slightly changes from 2013 to 2014. The dominant sector that suffered from financial losses in 2013 was the machinery and equipment production that haven't been classified to other groups and its losses rose up to 38% of enterprises' failure. In 2014, the loss-leader was the vehicles, trailers and other transport production (43.8%). It shows a high level of competitiveness inside this sector. The high intensity of business start-ups and low entry barriers made this sector the most attractive and the most risky in the machinery-building industry. The second place in 2013 was obtained by the electric machinery production (31.8%) and in 2014 by the machinery and equipment production (42.7%) that hasn't been classified to other groups.

The conducted research investigated the performance of 6 machinery-building enterprises in Kharkiv region by analyzing public data, managerial reports and insider information gained by a series of top-managers depth interviews in 2012-2014, in order to evaluate the level of their organizational adaptation, their internal and external flows, and the stage of their companies' life-cycle.

The analysis starts with the definition of the industry stage. We evaluate the machinery-building industry both by the entry barriers and the technology improvement factors. Table no. 3 data showed low entry barriers, high competitiveness and stagnation of industry, in general. Factors that make the industry parish are the lack of investments to improve technological base, high level of competitiveness within domestic and international market, ambiguity with taxation law and others. Due to the dynamics of competitiveness, the industry can be claimed as a mature one. Speaking about consumer orientation and technology improvement, the phase can be defined as a reliability phase. The adaptation intensity moderators should be taken into consideration, as well. So, the presented machinery-building industry can be defined as a mature, capital intensive, high-environmental circumstances changes and low technical advance.

The next step is to define the enterprises' life-cycle stages and their managerial peculiarities. The most appropriate method to use for the Ukrainian machinery-building industry evaluation is the financial

indicators method, because data for it can be taken from public sources. To take a conclusion about the life stage, we compare the company's income, their variable costs, break-even point, return on sales and turnover (Kostina G. P., Bashmakova M. M., 2003).

The results are presented in table no. 4. All the enterprises produce machinery-building widgets for domestic and international markets. The size of the studied companies can be defined as big, because of the total number of the employees that are higher than 100 for each enterprises. The organizational structure, general market strategy, peculiarities of organizing and maintaining companies' flows and the existence of logistic department had been scrutinized.

Table no. 4. Ukrainian machinery-building enterprises survey in 2012-2014

Industry	*Stage of industry developm ent*	*Enter prise*	*Life-cycle stage*	*Peculiarities of organizational adaptation of logistic system (LS)*				
				Organizationa l structure	*Logistics department*	*Material flow management*	*LS management*	*Market strategy*
Machinery-building	Mature, medium capital intensive, high environmental circumstances changes, low technical advance	FED Corporation LTD	Coordination	Linear function	+	Quality supply and production of raw materials	Only material flow is regulating	Coexistence
		Lozovaya Plant Traktorodetal	Collaboration	Linear function	+	Quality supply and production of raw materials	Only material flow is regulating	Cooperation

	State Plant Turboatom	State Scientific and Producing Union Communar	Plant Electrotyajmash	Kharkiv Plant of Electric Equipment
	Delegation	Coordination	Collaboration	Collaboration
	Linear function	Linear function	Matrix	Linear function
	-	-	-	-
	Complex (total) raw materials usage	Quality supply and production of raw materials	MRP (material resource planning)	Rational transportation organization
	Narrow range of decision making specialists, centralization	Only material flow is regulating	Informational flow coordination, low level of operating control	Logistic functions are distributed by functional departments
	Competitive	Coexistence	Cooperation	Cooperation

The companies' performances evaluation gave the following results. The enterprise (State Plant Turboatom) that implements competitive strategies and is on delegation phase of life-cycle has as cost-function to maximize decision accuracy. The representatives of the group of coexistence market strategy (FED Corporation LTD, State Scientific, Producing Union Communar) are on coordination phase; they have to maximize as an aim the number of produced widgets and might implement linkage change. The members of the cooperation market strategy (Plant Electrotyajmash, Kharkiv Plant of Electric

Equipment and Lozovaya Plant Traktorodetal) implementation union are on an collaboration phase. They target cost function minimizing salary and improving their financial performance as an adaptation solution; they need to use general adaptation, which states for both changes in agents and linkage. So, the qualitative and quantitative further analysis is needed to investigate adaptive management of internal and external flows of the mentioned enterprises. It might give some more specific information and can become a factor of changing their life-cycle stage and market positioning.

Conclusions

Due to the conducted research, the results shows the maturity stage of the analyzed machinery-building industry. Five from the six scrutinized enterprises are either on collaboration or on coordination stages of theirs life-cycle. The study shows that companies' internal flows management refers to their external market strategies and for each phase the peculiarities of organizing and maintaining material flow reflect the general enterprise efficiency.

The gained practical results can be interesting for scientists and industry's companies' top-managers.

The future research is to investigate the level of development of internal and external flows of the mentioned enterprises and create a business model of machinery-building industry company's logistic system adaptive management.

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ROA vs. ROIC

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Abstract
Last developments in financial reporting area have underlined the opportunity and necessity of extending the volume of financial information disclosed by financial statements. To ensure high quality financial information, not just a new marketing tool for managers, financial reporting strategies have been redesigned in order to give more focus on an integrated approach. This was an essential step on providing a solid ground for the new value-based management metrics, which were designed to evaluate management activities, not just on a financial perspective. This way there was emphasized the increasing importance of transferring, partially, information from management accounting to financial reporting. This study is providing evidence on the quantitative differences between the traditional metrics of financial performance and the value-based measurements, revealing significant gaps generated by transition to IFRS, lack of a solid conceptual framework, or fiscal considerations as well.
Keywords: IFRS, economic value added, fair value, market value, correlation

Introduction

The economic system has evolved in the last decades by an exponential trend towards an aggressive international market capitalization, continuous globalization, a significant increase of the multinational corporations' role on the politics of global economic policies, and especially a determinant role of institutional investors (investment funds) on national economies configuration. As expected, the accounting system had to follow the dynamics of the economic system in order the financial statements to disclose accurate and relevant financial information, as these still remain the main source of information for the investors and stake-holders. On this way, the preparers of financial statements have to give high importance to the quality of the financial information as it is essential on decision-making process, which has to lead to an optimal capital allocation and a fair revenue distribution among the factors of production.

It is real the problem of an existing lag between accounting systems development and economic system dynamics. But effort made by the main international actors in accounting normalization is visible and welcomed. It remains just the political factor to be convinced that this step is more important than own information interest as the enforcement process of any change in accounting regulation is in governmental agencies' attribution.

It seems that on the actual economic era, simply the financial information is not enough to give a concise and relevant image of a firm financial position and financial performance. That is why, preparers and users as well have agreed that the financial communication process has to extend its limits and approach the information on an integrated view. This way, complementary to the financial information, all relevant non-financial information has to be presented in correlation with the financial information, in order to depict clear financial situation, reveal relevant risk management information and improve forecast accuracy for valuation use (Beyer et. al., 2010; Lungu et. al., 2013). The way of correlating all these diverse information has given more attention to a recent tool of business performance management, namely the balance scorecard, which attempts to transfer more information from managerial accounting towards financial accounting (Diaconu et. al., 2003). This way, Kaplan & Norton (1996) have considered relevant the approach of reporting through four central perspectives: the financial perspective, marketing perspective, intern perspective and human-capital

perspective, trying to prove the causal interconnections between all these perspectives.

Moreover, main changes in financial information demand structure has forced the preparers of financial statements to consider fundamental reformulation of the financial reporting strategies in order to focus on an increase on voluntary disclosures as well. There is strong evidence that increase on financial disclosures raise significant cost of capital reduction and determine a positive market reaction (Leuz & Verrecchia, 2000). IFRSs seems to be an important tool on assuring the quality of financial voluntary disclosures, which are aimed to confirm figures disclosed by mandatory financial statements, increase investor confidence through a higher financial transparency and a reduction of ligation risk (Beyer et. al., 2010). But, this topic is still on a debate within the professionals, as the preparers prefer to use this reporting tool improperly. This way, most part of the annual report contains non-regulated financial information, which is disclosed voluntary, being easily transformed just on a simple marketing tool, through the use of various impression managements techniques correlated with psychology theories (behavioural finance, prospect theory, mental accounting theory) or sociological theories (attribution theory, counterfactual theory) (Pompian, 2006; Davis & Brennan, 2007; Koonce et. al., 2011). Thus, behavioural finance promote the thesis that financial information is useless as the perception of financial information users is negative, as the traditional finance models can't explain several abnormal earnings like where the cases of well-known fraudulent accounting cases of Enron, Parmalat or Tyco. This way, they try to build different patterns of content analysis of financial information. Also, there are cases where managers try to explain bad results based on economic environment influence, or they just omit including essential financial information on the annual report.

The accounting standard-setting bodies have just to identify the suitable level of financial reporting regulation, as the economic implications vary within jurisdictions, based on a cumulative effect of numerous factors generating accounting systems differences, such as political factor, market incentives, maturity of professionals bodies, level of education, macroeconomic context, cultural factor and the list can continue (Nobes & Parker, 2008).

This article is aimed to reveal the importance accruals have on financial ratios deterioration, because of the various creative accounting

techniques used and accounting treatments diversity determined by the multiple choice provisioned by accounting standards. The study will focus on analyzing the correlation between accounting-based earnings and the price of market-shares for several companies listed on Bucharest Stock Exchange.

Literature review

Financial information is essential on the process of decision-making, even if we talk about financing decision or investment decision. Accounting-based figures are the basic input on financial management and valuation of an enterprise. The quality of financial information disclosed by annual report can affect directly a firm's market-value and facilitate debt contracting at a lower cost (Barth et. al., 2005; Ball et. al, 2008). Moreover, the accounting-based financial ratios are frequently used on managing the agency problem and the design of an optimal contract of mandate for managers which should establish roles of game meant to prevent moral hazard and adverse selection (Bushman & Smith, 2001).

The topic of managing information asymmetry has been widely discussed and different approached were used, like mathematical modelling, as an application of game theory, or simply by empirical evidence of perceptions and correlations between managerial compensation versus financial performances. Additionally, in the literature there are long discussions regarding the proper covenants that should be used in order to reduce costs of agency problem, as some of the financial ratios are significantly affected by different creative accounting techniques? We remind here the results of Christensen & Nikolaev (2011) study, who analyze more specifically the problem of using accounting information in solving the agency problem. First of all, they emphasize that the use of the two types of covenants are negatively correlated. More than that, they notice that the use of capital covenants is preferable in case the contractibility of accounting information decreases, implying potential future litigation costs. In case the investors prefer a higher involvement on company's management activity, they will prefer to use performance covenants, meaning that they will focus not just on preserving their investment, but also will follow the efficiency and effectiveness of managerial actions.

The existing problem is that financial information still has to be more comparable as accounting diversity hasn't been eliminated, even

the international accounting convergence process has registered real success worldwide and IFRSs have been implemented on more than 100 jurisdictions (Nobes, 2011). All these differences impact directly on efficient capital allocation encouraging underinvestment and creating a negative perception of financial information quality within investors, the owners of the capital with highest risk (Biddle et. al., 2009).

To prevent potential shareholders disinvestment by different creative or fraudulent accounting techniques, there were underlined several central direction of financial information quality assuring, which consist of country-level tools and firm-level tools as well. If the enforcement efficiency is in political factor hands, improvements on areas such auditing, corporate governance mechanism and professionals education have to be ensured by every firm on its own (Soderstrom et. al., 2007). Accounting standards quality does not necessary translate in high quality of financial information as market incentives, tax planning or managerial compensation schemes reveal the central managers motivation on drawing financial reporting strategies. Even more, on the context of recent financial crisis, the financial transparency of a firm is essential on managing the cost of capital and the market-value of firms, which should lead to earnings management prevention and confidence consolidation on a long-term time span (Lang et. al., 2012).

The opportune and mandatory reformulation of financial performance metrics is recommended, as even Hail (2013) study reveal. She notice that along a 30 years analysis, accounting practice evolution has negatively affected especially the profit and loss statement, on the ground of various used earnings management techniques, while the balance-sheet informational content relatively remained constant under the pressure of the institutional framework.

Table no. 1. Value-based metrics

Financial metric	Formula	Elements
Corporate value	$$CV_t = NA_t + \sum_{i=1}^{n} \frac{PVB_i}{(1 + WACC_i)^i}$$	PVB_i – value-based performance metric; $WACC_i$ – weighted average cost of capital;
Residual Income	$$RI_t = NE_t - WACC_t \cdot NA_{t-1}$$	NE_t – net earnings before interest expenses; NA_{t-1} – book value net assets;
Economic Value Added	$$EVA_t = NOPAT_t - WACC_t \cdot CI_{t-1}$$	$NOPAT_t$ - net operating profit; $Capital_{t-1}$ –capital invested;
Economic Profit	$$EVA_t = NOPLAT_t - WACC_t \cdot E_t$$	$NOPLAT_t$ - net operating profit less adjusted taxes; E_t – equity capital;
Cash Value Added	$$CVA_t = OGCF_t - ED_t - WACC_t \cdot GI_{t-1}$$	$OGCF_t$ - operating gross cash flow; ED_t – economic depreciation; GI_{t-1} – gross investment;
Cost of capital	$$WACC_t = \frac{E_t}{CI_t} \cdot c_{E_t} + (1 - r) \cdot \frac{D_t}{CI_t} \cdot c_{D_t}$$	E_t – equity capital; D_t – debt; c_{E_t} - cost of equity capital; c_{D_t} – cost of debt; r – tax rate;

Source: Authors own projection

In order to eliminate the role of accounting differences, the professionals have designed additional key performance indicators that have become widely used instead of the traditional performance indicators. They are laudable the efforts of accounting standard-setters on importing the valuation approach of financial structures of the financial statements, to reflect a true and fair view of the financial situation of the companies. Unfortunately, the implementation of the

concepts like fair value, economic resources, or simply the incapacity of accounting standards to manage the uncertainty through accounting estimates have made opportune the use of new financial performance metrics that focus especially on reflecting management activity impact on shareholders' value creation. The accounting-based measures are not suitable as they are highly impacted by the accounting choice and discretionary disclosures.

   The main goal of financial management is the maximization of shareholders' investment. For this, each company is implementing differently a value-based system of performance indicators, in order to target and monitor the impact of management activities on shareholders value-added. The main difference between earnings and value-added metrics is that earnings omit the opportunity cost of capital. Additionally, influence of financing schemes like lease-back, the use of big-bath accounting techniques will be eliminated as value-based measures are analyzed on a longer timeframe, using forecasts adjusted to reflect cash flow measures instead of accounting-based forecasted earnings (Holler, 2009).

   The most used value-based metrics are the residual income (RI), the economic value-added (EVA), the economic profit (EP), or the cash value-added (CVA), as single-period metrics. The market value of each metric can be determined by the sum of the discounted single-period values, considering the risk of invested capital. The risk of invested capital is to be determined based on the CAPM relation, which has to reflect the marginal gain for investor of each additional unit of invested capital.

   The EVA metric, compared to the RI and EP, differs by the accounting adjustments done in order to eliminate the accounting policy impact on the financial performance, like is the amortization method, the way of recognizing the research and development expenses, the lease treatment, the delimitation done between equity financial instruments versus debt financial instruments etc. For this, there were developed other indicators which have replaced book depreciation with economic depreciation, as is the case of cash value added metric.

Fig. no. 1. Qualitative characteristics of common performance metrics

	Traditional measures			Cash flow measures			Residual income measures			
	EPS	ROE	RONA	DCF	SVA	TBR	RI	EVA	EP	CVA
Validity	-	-	-	+	+	+	+	+	+	+
Controllability	+	+	+	+	+	-	+	+	+	+
Consistency	N/A	-	-	+	+	+	+	+	+	+
Objectiveness	+	+	+	-	+	+	+	+	+	-
Periodic delimitation	+	+	+	+	-	+	+	+	+	+
Ease of implementation	+	+	+	+	+	+	+	+	+	-
Depreciation neutrality	-	-	-	+	+	+	-	-	-	+

Source: Holler (2009), New metrics for Value Based Management

Traduced on the basis of traditional metrics, the value-based management metrics can be determined according to the following relations (Fernandez, 2002):

➢ economic profit (EP): $EP_t = \left(ROE - r_{E_t}\right) \cdot E_t$, where r_{E_t} is the required return to equity;

➢ economic value added (EVA): $EVA_t = (ROA - WACC_t) \cdot CI_t$;

➢ Cash value added (CVA): $EVA_t = (CFROI_t - WACC_t) \cdot GI_t$.

A central difference between traditional metrics, such as ROE, ROA or ROI is that the value-based performances consider in calculation investors' expectations as well.

There is no recipe for the best metric to be used, as it should be chosen based on the analysis aims. It is obvious that cost of capital is reflecting the risk of capital invested and the expected return of investors as well. Regarding this key indicator, based especially on balance-sheet statement, the focus should be on the quality of the financial structure of an entity, because even the functional balance-sheet does not eliminate completely issues of accounts classification. Currently, IASB current project of conceptual framework for financial

reporting is dealing with this topic, without a final result, as the project was rescheduled for new board deliberation for 2015.

Overall, all these new financial performance metrics lead to a consistent reduction of accruals influence on performance management. But they do not completely eliminate all the problems of recognition, measurement or reclassification of financial statements elements. That is why the new metrics should be analyzed cautiously, in strong correlation with information revealed by the capital markets.

Methodology research

On this study we will analyze the correlation between return on invested capital (ROIC) versus return on equity (ROA). The difference between the two metrics can be explained by the cost of opportunity for the equity capital which is not included in the ROA measurement.

ROIC is calculated by relation $OIC = \dfrac{EVA}{Capital\ invested}$

ROA is calculated by formula $= \dfrac{Gross\ profit}{Capital\ invested}$

Our sample consists of 9 listed companies on BSE, activating on pharmaceutical area and extraction industry. The dates were collected manually from the statutory financial statements available online on the analyzed companies' website.

By PV of operating leases we mean to present value of annual payments for the operational leases, as they have to be added to the invested capital, because they are initially considered off balance-sheet accounts. They are calculated based on the relation

$PV_{ol} = Rate \cdot \dfrac{r_d}{1 - (1 + r_d)^{-n}}$, where r_d is the debt interest rate calculated

for the Romanian economic environment (Damodaran, 2012). The rate represents the annual payment planned till the end of the concession contract. It is just the case for BioFarm, as the rest of the companies have no current operating leases.

The model used on calculating EVA is the following.

Table no. 2. Economic Value Added calculation framework

Financial performance impact		Financial position impact	
(bottom-up approach)		(asset approach)	
Indicator	*Sign*	**Indicator**	*Sign*
Taxes		*Net operating assets*	
Interests		Net PPE	+
EBIT		Intangibles	+
Advertising costs	+	Other assets	+
Interest on operating leases	+	Bad-debt reserve	+
Variance in bad-debt reserve	+	Capitalized R&D (unamortized)	+
R & D expenses	+	PV of operating leases	+
Depreciation of R & D	+	= **Invested Capital**	
= *Adjusted Operating Profit*		Equity	-
Variance in deferred income taxes	-	Cost of equity	*
Taxes on non-operating income	-	Debt	+
Interest expense tax	+	Cost of debt	*
= *Cash operating taxes*	+	Leverage	
= **NOPAT**		= **WACC**	

Source: Grant (2003), Foundations of Economic Value Added

Table no. 3. PV of operating leases (Biofarm)

							Interest value		
Year of contract remained	*Discount*	Value 2011	*Discount*	Value 2012	*Discount*	*Value 2013*	2011	2012	*2013*
1	4.136	473471	3.412	390611	2.640	302217	31628	26093	20188
2			3.032	153588	2.235	113192		10260	7561
3					1.816	72152			4820
	Total	473471		544199		487560	31628	36352	32569

Source: Authors own calculation

For the cost of capital calculus we have used the following dates, as we have chosen to calculate a country level cost of capital in order to eliminate the influence on the analyzed financial performances of the

specific characteristics of financing policy of each company included on the sample.

Table no. 4. β index (by company)

Pharmaceutical industry		Energy & extraction industry	
Company	**Value**	**Company**	**Value**
Antibiotice	0.570	OMV Petrom	1.000
BioFarm	0.720	RomPetrol Rafinare	0.690
RoPharma	0.570	RomPetrol Service	0.890
Zentiva	0.670	TransElectrica	0.860
		TransGaz	0.910

Source: www.kmarket.ro (august 2014)

The relation for cost of capital calculation is $WACC_t = r_0 + \beta \cdot (r_E - r_0)$ for each company, as the β differs.

Table no. 5. Interest rates for the Romanian economic environment

Debt interest				Equity interest	
	Risk free rate of interest	Risk Premium	**Cost of debt (r_D)**	Country Risk Premium (r_0)	3.30%
2011	7.22%	4.80%	12.02%	Equity Risk Premium (r_E)	8.30%
2012	6.48%	5.10%	11.58%		
2013	5.16%	5.60%	10.76%	Tax rate	16.00%

Source: BNR, World Bank, Damodaran (2013)

There will be analyzed the evolution of both financial performance metrics mentioned above considering also the accounting adjustments, if necessary. The analysis will end with a correlation matrix interpretation in order to express the evolution from 2011 to 2013 for each company in our sample.

Results and discussions

As expected, the results of our study reveal high absolute and relative differences between value-based performance metrics versus accounting-based performance measures. There can be noticed a more visible impact of accounting adjustments on EVA components in case of energy & extraction industry firms. This is explained especially by the non-interests bearing current liabilities, meaning accounts payable, wages payable or tax accruals. This means that the industrial specific represents a main factor in order to explain the differences between total assets and invested capital. This is because not all these assets are actively used on the current production processes.

Table no. 6. Accounting adjustments

	Domain of activity	Marketing expenses	R&D expenses	Variance in bad-debt reserve	Variance in deferred income taxes
Antibiotice	Pharmaceutical	x		x	x
BioFarm	Pharmaceutical	x		x	x
Nuclear Electrica	Energy & Extraction			x	x
OMV Petrom	Energy & Extraction		x	x	x
RomPetrolRafinare	Energy & Extraction	x		x	x
RomPetrol Service	Energy & Extraction	x		x	x
RoPharma	Pharmaceutical	x		x	x
TransElectrica	Energy & Extraction	x		x	x
TransGaz	Energy & Extraction	x	x	x	x
Zentiva	Pharmaceutical	x		x	x

Source: Financial statements

Table no. 7. Accounting adjustments values on NOPAT

Company	EBIT			NOPAT			NOPAT adjustments (%)		
	2011	*2012*	*2013*	*2011*	*2012*	*2013*	*2011*	*2012*	*2013*
Antibiotice	31	42	51	31	42	51	21.39%	48.10%	-4.28%
BioFarm	15	15	22	12	13	19	17.25%	17.84%	9.42%
OMV Petrom	4660	4660	5332	3923	3927	4504	0.09%	-0.74%	-0.75%
RomPetrolRafinare	-324	-324	-218	-324	-324	-218	-144.08%	-141.29%	-31.64%
RomPetrol Service	15	15	30	15	15	30	2.36%	0.59%	0.59%
RoPharma	12	12	11	10	10	9	90.80%	71.10%	79.55%
TransElectrica	176	176	249	142	163	210	32.47%	44.69%	40.94%
TransGaz	442	442	536	368	378	440	10.47%	22.75%	10.87%
Zentiva	38	38	51	38	38	51	-0.16%	0.88%	3.41%

Source: Authors own calculation

Table no. 8. Accounting adjustments impact on ROIC

Company	With adjustments			Without adjustments			%Δ		
	2011	*2012*	*2013*	*2011*	*2012*	*2013*	*2011*	*2012*	*2013*
Antibiotice	-4.19%	0.45%	-0.02%	-3.39%	-11.33%	-8.81%	*0.80%*	*-11.78%*	*-8.80%*
BioFarm	-5.03%	-4.83%	-1.29%	-6.22%	-12.29%	-11.07%	*-1.19%*	*-7.46%*	*-9.78%*
OMV Petrom	1.53%	0.61%	0.88%	-1.52%	-13.82%	-12.68%	*-3.06%*	*-14.43%*	*-13.56%*
RomPetrolRafinare	-9.80%	-9.93%	-12.83%	-16.99%	-11.77%	-10.57%	*-7.19%*	*-1.84%*	*2.27%*
RomPetrol Service	-3.52%	-4.08%	4.41%	-3.95%	-13.61%	-12.12%	*-0.43%*	*-9.53%*	*-16.52%*
RoPharma	-7.12%	-6.89%	-5.94%	-9.45%	-11.47%	-8.25%	*-2.33%*	*-4.58%*	*-2.31%*
TransElectrica	-9.28%	-7.36%	-5.24%	-9.97%	-12.59%	-10.57%	*-0.69%*	*-5.22%*	*-5.33%*
TransGaz	-2.75%	-0.18%	1.61%	-4.58%	-13.46%	-11.37%	*-1.83%*	*-13.28%*	*-12.98%*
Zentiva	-1.17%	0.52%	4.42%	-1.62%	-11.94%	-10.54%	*-0.45%*	*-12.46%*	*-14.96%*

Source: Authors own calculation

Table no. 9. Accounting adjustments impact on ROIC

Company	ROIC (with adjustments)			ROA		
	2011	*2012*	*2013*	*2011*	*2012*	*2013*
Antibiotice	-4.19%	0.45%	-0.02%	6.30%	8.12%	10.04%
BioFarm	-5.03%	-4.83%	-1.29%	8.17%	7.61%	10.59%
OMV Petrom	1.53%	0.61%	0.88%	15.27%	14.24%	13.71%
RomPetrol Rafinare	-9.80%	-9.93%	-12.83%	-5.00%	-4.40%	-2.93%
RomPetrol Service	-3.52%	-4.08%	4.41%	10.37%	9.33%	16.41%
RoPharma	-7.12%	-6.89%	-5.94%	3.13%	3.35%	3.07%
TransElectrica	-9.28%	-7.36%	-5.24%	3.39%	3.55%	4.83%
TransGaz	-2.75%	-0.18%	1.61%	11.13%	11.32%	13.62%
Zentiva	-1.17%	0.52%	4.42%	10.96%	11.79%	14.05%

Source: Authors own calculation

Table no. 10. Accounting adjustments values on invested capital

Company	Total assets			Total adjustments			Invested capital		
	2011	*2012*	*2013*	*2011*	*2012*	*2013*	*2011*	*2012*	*2013*
Antibiotice	487	514	512	1.78%	-2.01%	5.21%	478	525	486
BioFarm	185	199	211	1.30%	0.33%	0.18%	183	198	210
OMV Petrom	30513	32719	38895	29.13%	26.03%	20.23%	23630	25961	32350
Rompetrol Rafinare	6480	7367	7451	0.58%	1.37%	1.42%	6442	7267	7347
RomPetrol Service	143	159	181	2.22%	1.95%	1.66%	140	156	178
RoPharma	384	359	343	-1.96%	-1.97%	-2.07%	392	366	350
TransElectrica	5181	4945	5153	7.59%	11.97%	11.03%	4815	4416	4641
TransGaz	3973	3906	3935	13.90%	13.80%	13.62%	3488	3432	3463
Zentiva	348	323	360	4.48%	4.87%	4.24%	333	308	345

Source: Authors own calculation

Another difference between the two industries is that pharmaceutical companies focus especially on R & D projects and sales operations. Instead, the energy & extraction companies have a larger cash-cycle time which would lead to a more probable incertitude regarding the accounts receivable vs accounts payable, reflected automatically on the working capital needs of the period. This assertion is based on the significant differences between NOPAT and EBIT, raised by the variance in bad-debt reserves, really high in case of energy & extraction companies compared to the pharmaceutical ones.

But, the difference between NOPAT and EBIT is explained, mainly, by cash operating taxes, as expected, because Romanian accounting regulation is still polluted by multiple fiscal consideration, in order the companies to gain fiscal economies based on deductibility of several expenses.

Table no. 11. EVA and cost of capital values

Company	WAC			EVA					
				With adjustments			Without adjustements		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Antibiotice	0.12	0.11	0.10	-20.1	2.4	-0.1	-16.5	-58.3	-45.1
BioFarm	0.13	0.12	0.11	-9.2	-9.6	-2.7	-11.5	-24.4	-23.3
OMV Petrom	0.15	0.14	0.13	362.4	157.8	284.1	-464.9	-4523.1	-4930.9
RomPetrol Rafinare	0.12	0.12	0.11	-631.5	-721.4	-942.7	-1100.9	-866.8	-787.3
RomPetrol Service	0.14	0.14	0.12	-4.9	-6.4	7.8	-5.7	-21.7	-21.9

RoPharma	0.12	0.11	0.10	-27.9	-25.2	-20.8	-36.3	-41.2	-28.3
TransElectrica	0.13	0.13	0.12	-446.8	-325.2	-243.2	-516.3	-622.3	-544.4
TransGaz	0.14	0.14	0.12	-96.0	-6.3	55.7	-181.9	-525.7	-447.5
Zentiva	0.13	0.12	0.11	-3.9	1.6	15.3	-5.6	-38.6	-37.9

Source: Authors own calculation

For almost all companies analyzed, the EVA seems to be negative, whereas the EBIT value is negative just in case of RomPetrol Rafinare. This is clear evidence that recommend managers, and especially shareholders, to reformulate the financial performance scorecard, as the traditional performance indicators can't reflect a true and fair economic reality of a company.

Table no. 12. Descriptive statistics

Year		ROIC		ROA		Price	
		Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error
2011	Mean	-4.59%	1.23%	7.08%	1.99%	28.82	26.09
	Std. Deviation	3.70%		5.98%		78.26	
	Minimum	-9.80%		-5.00%		0.05	

Year							
	Maximum	1.53%		15.27%		236.81	
2012	Mean	-3.52%	1.34%	7.21%	1.89%	25.26	23.29
	Std. Deviation	4.02%		5.66%		69.88	
	Minimum	-9.93%		-4.40%		0.03	
	Maximum	0.61%		14.24%		211.22	
2013	Mean	-1.56%	1.86%	9.27%	2.11%	23.63	21.64
	Std. Deviation	5.58%		6.34%		64.91	
	Minimum	-12.83%		-2.93%		0.04	
	Maximum	4.42%		16.41%		196.34	

Source: Calculation with SPSS 20.0

Compared to traditional financial performance indicators, the value-based metrics have to be analyzed on a long-term timeframe and the focus must be oriented on the evolution trend, not especially on the absolute values.

Table no. 13. Correlation matrix

Overall correlation

		ROIC	ROA	Price
Price	Pearson Correlation	.188	.237	1
	Sig. (2-tailed)	.347	.234	

Correlation with price, per year

	2011	*2012*	*2013*
ROIC	0.150	0.292	0.200
ROA	0.238	0.260	0.243

Source: Calculation with SPSS 20.0

Unexpected, the result show a stronger correlation between ROA and the market-share price, compared with the ROIC value vs market-share price. This situation can be explained, mainly, by the transitory accruals generated by transition to IFRS adoption, reflected on the 2012 and 2013 financial year figures (Burca & Cotlet, 2014). Thus, financial statements like provisions for uncertain receivables, an increase use of fair value convention for assets measurement and especially assets reclassifications, have generated visible accounts differences. The influence of assets reclassification can be observed by the Pearson Correlation coefficient evolution, as the variance in case of ROIC is larger, compared to the ROA correlation coefficient.

Conclusion

Financial performance analysis raises numerous limitations of financial statements because of more complex business models. Additionally, in case of the Romanian economic environment, the financial reporting process transforms into a real trade-off between market incentives versus fiscal incentives. As our capital market is still at a lower level of information efficiency, it is obvious that currently the fiscal rule prevalence persist on drawing the accounting policies. Consequently, earnings management, limited by a stronger enforcement framework, hunts any potential fiscal economies, deterring significantly the accounts.

As a partial solution, especially in case of management remuneration, investors have begun to use new metrics for financial performance measurement, focused more on shareholder value creation, rather than patrimony conservation. Thus, metrics like EVA, economic profit or cash value added have revealed a different financial reality of companies' financial figures.

Our study provides evidence with significant difference between the traditional financial performance metrics and the new value-based ones. Main impact was generated by transitory accruals determined on transition of financial reporting to IFRS. A second factor, but not less important, is the fiscal pollution of the accounting treatments. Also, the accounting system incapability to manage uncertainty in order the accounting figures to reflect a true and fair view of financial situation is considered on the top of the factors explaining the differences between the two types of financial performance metrics.

There are limitations of our study, as our sample consists of only 9 companies from just two economic areas. Also, the timeframe for value-based metrics is still short, as these key indicators are recommended to be analyzed on a long-term perspective, using financial forecast. Further research can be realized in order to establish an econometric relation between value-based metrics vs share-market price, in contrast to relation between traditional accounting measures vs share-market price. Moreover, the methodology research can be improved by extending the accounting adjustment operated on EVA calculation. Additionally, analysis is opportune to be done towards application of the new value-based metrics in case of unlisted companies.

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Performance of Socially Responsible Stocks Portfolios – The Impact of Global Financial Crisis

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Abstract
For the effective and better implementation of CSR law, development of SRI market in the investment world is essential. Unless the investors turn socially responsible, CSR principles cannot be enforced in practice. This paper examines whether the companies that are socially responsible are performing better than general companies in terms of risk, return and various risk-adjusted measures during pre-crisis, crisis and post-crisis periods. We find that despite having higher risk, socially responsible stocks portfolios generated significantly higher returns and hence outperformed other portfolios on the basis of all risk-adjusted measures, as well as net selectivity returns during crisis period. The results uphold even with the use of Fama-French three factor model for estimating excess returns. Besides augmenting existing literature, our results clearly corroborate the fact that investors can derive benefits by investing in socially responsible companies (especially in crisis period). The study supports the view that socially responsible products

can be used as a safe investment vehicle by investors during adversity. Therefore, regulators, policy makers and mutual funds should construct and make available various socially responsible investment products to initiate the movement of socially responsible investing in India.

Keywords: Socially Responsible Investing, ESG Index, GREENEX Index, Dummy Variable, Market Model, Fama-French Three Factor Model

Introduction

The origin of SRI came into prominence in 1920 when Church organizations began to divest in "sin stocks" of companies that produced alcohol, tobacco and engaged in gambling activities. With the growing awareness of environmental, social, governance (ESG) and ethical factors, attitude of today's investor is changing. This development is fuelling the investors (retail and institutional) to invest their money in an ethical way. In today's world of finance, SRI is attracting lot of investors' attention. According to Social Investment Forum (SIF), approximately 10% of all US investments are managed according to some screening process related to environment, social, governance and ethical issues.

For the effective and better implementation of CSR law, development of SRI market in the investment world is essential. Indian Companies Act, 2013 makes it mandatory for certain companies to undertake CSR activities. Tripathi and Bhandari (2014) have argued that SRI can bolster the CSR law and said that "Unless the investors turn socially responsible, CSR principles cannot be enforced in practice". They argue that if stock market values socially responsible companies and does not value non-socially responsible companies, then the CSR law will witness better and effective implementation.

The concept of SRI is not new to the world of finance, but it has gained momentum in the last decade. Socially responsible investing (SRI) is an investment process that considers the social and environmental consequences of investments besides financial consequences, both positive and negative, within the rigorous framework of financial analysis. It can also be defined as a process of

identifying and investing in a company that meets certain standards of CSR and is increasingly practiced internationally.

The first question that may be asked by every investor before investment in SRI products is whether such investment generates returns higher than their peers or not. The reason for this could be unwillingness to sacrifice financial returns for ESG issues. Thus, this paper tries to examine an interesting notion that whether the portfolios of socially responsible companies outperform those of general companies in the Indian stock market during the identified break periods, especially the period surrounding the financial crisis? This will help investors in examining how socially responsible stocks portfolios performed during adversity (crisis) in comparison with general stocks portfolios. On account of the identified break periods, the main objectives of the paper are:

● To examine whether socially responsible stocks portfolio generated significantly higher returns than the general stocks portfolio and market portfolio.

● To assess whether socially responsible stocks portfolio outperformed general stocks portfolio and market portfolio on the basis of various risk-adjusted measures.

● To analyze the performance of different socially responsible and general stocks portfolio on the basis of net selectivity return.

● To evaluate the impact of break periods (pre-crisis, crisis and post-crisis) on the returns of various portfolios using Modified Market Model and Fama-French Three Factor Model.

The remainder of this paper is organized as follows. Section 2 provides brief review of literature regarding performance of socially responsible products with general products. Section 3 describes the data and methodology of the research work. Section 4 discusses the empirical evidence and the results, while Section 5 concludes the research. It concludes that by considering social, environmental and ethical factors, investors can derive financial benefits from their investment.

Hamilton, Jo and Statman (1993) found that socially responsible mutual funds did not earn statistically significant excess returns and that the performance of such funds is not significantly different from conventional funds. Their results indicated that the market does not value social responsibility factors and such factors have no significant effect on expected stock returns.

Statman (2000) reported that performance of Domini Social Index was identical to S&P 500 over the period 1990-1998. He compared the returns of 31 SRI funds with 62 conventional funds and finds no significant difference in their returns. However, the return of 31 SRI funds underperformed the S&P 500 by an average of 6.26% p.a.

King and Lenox (2001) examined whether stronger environmental firms outperform weaker environmental firms and concluded that the financial performance of stronger environmental companies was significantly better. According to the report of RBC Global Asset Management (2007), socially responsible investing does not result in lower investment returns. This is an important finding because it lends support to the case of SRI. Retail and institutional investors can invest in SRI related products with the expectation that the returns will be similar to those from traditional investment options.

Kempf and Osthoff (2007) reported significant positive risk-adjusted returns for a US portfolio based on SRI during 1992-2004. Their portfolio was based on long-short strategy by investing in the 10% best SRI stocks within each industry and shorting the 10% worst SRI stocks in each industry.

Hume and Larkin (2008) showed that the return of socially responsible firms was higher prior to 2000, reflecting that investors require more investments in socially responsible firms. Their results also reported that the portfolio of "vice stocks" had the best performance on a risk-adjusted basis, especially in the more recent years, suggesting that the investors underestimated the benefits of being social irresponsible.

Amenc and Sourd (2008) established that using Fama-French three factor model, socially responsible funds in France were not able to produce significant positive alpha over the period Jan. 2002 – Dec. 2007. However, Amenc and Sourd (2010) updated these results by considering the period of crisis. Their results revealed that SRI funds provided no protection from market downturns as the risks of these funds were quite high.

Tripathi and Bhandari (2012) tried to examine whether there is a significant difference in the returns of various green and non-green stocks portfolio and found that green blue chip stocks portfolio generated significantly higher returns than market returns implying that green investing was more rewarding and could be safer bet for investors during the crisis period. Elias (2012) analyzed the performance of

Shariah compliant stocks and found that the returns of these stocks showed the effect of positive net selectivity.

Bhanumurthy, Bhandari and Pandey (2014) checked whether price discovery and returns of socially responsible companies is higher than by general companies which are not surrounding the financial crisis period. They found that both, price discovery and returns of socially responsible companies were significantly superior to general companies both, during and post crisis period.

Tripathi and Bhandari (2015a) supported the existing literature by analyzing the performance of socially responsible stocks portfolio and general stocks portfolio in the Indian stock market using various risk-adjusted measures over the 18 year period and period surrounding the financial crisis. They find that socially responsible stocks portfolio generated significantly higher returns and outperformed other portfolios, especially during crisis period. Their findings lend support to the case of socially responsible investing in India.

Tripathi and Bhandari (2015b) have compared the performance of socially responsible stocks portfolios with general stocks portfolios over different business economic conditions. They find that socially responsible portfolios generated significantly higher returns than general portfolios and outperformed them using single factor alpha and multi factor alpha. Their findings support the view that socially responsible investing is boon for investors in India.

Tripathi and Bhandari (2015c) have evaluated the performance of ethical mutual funds with their conventional peers and reported that despite having higher risk, ethical funds outperformed on the basis of various risk-adjusted measures and net selectivity returns.

Tripathi and Bhandari (2015d) have examined the performance of socially responsible firms and general firms in terms of growth rate, risk and various risk-adjusted measures during different structural break periods. They find that growth rate of socially responsible companies were significantly better than by general companies during crisis period. Socially responsible companies outperformed general companies in terms of return and various risk-adjusted measures, but not on the basis of risk.

Methodology and Data

The study examines the performance of three types of portfolios (viz. socially responsible stocks portfolio, general stocks portfolio and market

portfolio) over a 9 year period, from January 2005 to December 2013. Various proxies have been used to represent socially responsible stocks portfolio and general stocks portfolio. S&P ESG India Index, S&P BSE GREENEX Index, Socially Responsible Blue Chip (SRBC) stocks portfolio and Socially Responsible Non Blue Chip (SRNBC) stocks portfolio have been used as the proxies for socially responsible stocks portfolios. General stocks portfolios comprise of the portfolios of large cap companies. Hence, NIFTY, SENSEX, Blue Chip Non Socially Responsible (BCNSR) stocks portfolio and Mimicking stocks portfolio are representing general stocks portfolios as these portfolios include the large cap companies. Theoretically, market portfolio comprises of all available stocks in the stock market. Hence, CNX 500 Equity Index is being used as the proxy for market portfolio. ESG Index is used to get the names of socially responsible companies. SRBC stocks portfolio comprises of those companies which are common in ESG Index and NIFTY. However, SRNBC stocks portfolio includes those companies which are in ESG Index only but not in NIFTY and BCNSR stocks portfolio contains companies listed in NIFTY but not in ESG. We have constructed Mimicking stocks portfolio by using the same sectoral composition as that of ESG Index, but selecting 50 different companies on the basis of same size (in terms of market capitalization). The calculations are done on the basis of stock price data of these companies. Monthly adjusted closing index values and company stock prices were collected from PROWESS database of CMIE (Centre for monitoring Indian economy). These values are then converted into simple percentage returns as (Pt – Pt-1)/Pt-1. Implicit yield on 91 days T-bills have been taken as a proxy for risk-free rate of return. Next we calculated Karl Pearson's coefficient of correlation among all these nine portfolios, descriptive statistics, portfolio beta and various risk adjusted measures for performance evaluation. The analysis has been done for total period (9 years) to evaluate the returns over a longer period and for different break periods as identified by Tripathi and Bhandari (2015). Different dates for break periods are as follows:

January 2005 – September 2008 (Pre-Crisis Period)
October 2008 – December 2009 (Crisis Period)
January 2010 – December 2013 (Post-Crisis Period)

Methodology

Extant literature is available on socially responsible investing but not much empirical work has been done so far with respect to performance of various socially responsible portfolios and general portfolios during

identified break periods. Apart from conventional measures of performance evaluation, we are trying to use new methodology for evaluating the performance of various portfolios during the above said periods. To accomplish our objectives, following hypotheses have been tested:

1. There is no significant difference in the returns of socially responsible stocks portfolio, general stocks portfolio and market portfolio during the overall period and identified break periods.

2. Performance of socially responsible stocks portfolio matches with the performance of general stocks portfolio and market portfolio using various risk adjusted measures during overall period and identified break periods.

3. There is no difference in the performance of socially responsible stocks portfolio and general stocks portfolio on the basis of net selectivity return during overall period and identified break periods.

4. Identified break has no impact on the returns of various portfolios using Modified Market Model and Fama-French Three Factor Model.

Methods used:

1. Sharpe Ratio: This ratio measures the return of the portfolio (AR_P) in excess of risk-free rate (R_F), compared to total risk of the portfolio (σ_P). Since it uses standard deviation as a measure of risk, it does not assume that the portfolio is well diversified.

$$\text{Sharpe ratio} \quad = \quad \frac{AR_P - R_F}{\sigma_P}$$

2. Treynor Ratio: This ratio measures the relationship between return of the portfolio, above the risk-free rate, and its systematic risk indicated by portfolio beta (β_P). Since it only takes systematic risk into account, hence this ratio is relevant for evaluating the performance of well diversified portfolios.

$$\text{Treynor ratio} \quad = \quad \frac{AR_P - R_F}{\beta_P}$$

3. Modified Sharpe Ratio: Israelsen (2005) argued that Sharpe ratio may lead to spurious ranking when excess returns of portfolios are negative. He proposes to correct this anomaly by modifying the standard Sharpe ratio, introducing an exponent to the denominator of Sharpe ratio. It can be calculated as:

$$\text{Modified Sharpe Ratio} \quad = \quad \frac{AR_P - R_F}{\sigma_p \left[(AR_P - R_F)/ABS(AR_P - R_F) \right]}$$

4. Double Sharpe Ratio: Since Sharpe ratio considers only sample of returns, this ratio is being used to represent the whole population of returns. Estimation of this ratio requires series of Sharpe ratio using individual return, standard deviation and risk free rate. It can be calculated as:

$$\text{Double Sharpe Ratio} \quad = \quad \frac{A(S_P)}{\sigma(S_P)}$$

where, $A(S_P)$ = Average of Sharpe Ra
$\sigma(S_P)$ = Standard Deviation of Sharpe Ratios

5. M^2 Measure: Generally we compare the returns of portfolios with different levels of volatility (standard deviation). Modigliani and Modigliani (1997) showed that portfolio and its benchmark must have the same level of risk to be compared in terms of risk-adjusted performance. We imagine that a particular risky portfolio (P) is mixed with risk-free asset (T-bills), so that the resultant or adjusted portfolio (P*) matches the volatility of market portfolio (CNX 500 Equity Index). With the same standard deviation of market index and managed portfolio, we may evaluate their performance by comparing returns.

$$M^2 \quad = \quad R_P* - R_M$$

where, R_P* = Return of Managed Portfolio
R_M = Return of Market Portfolio

6. Jensen's Alpha: It is used to determine the abnormal return (α) of a security or portfolio of securities over the theoretical expected return. The theoretical return is predicted by a market model. A portfolio with a consistently positive excess return (adjusted for risk) will have a positive alpha and vice-versa. It can be calculated as:

$$R_P - R_F = \alpha + \beta_P (R_M - R_F)$$

or

$$\alpha = R_P - [R_F + (R_M - R_F) \beta_P]$$

7. Multi Factor Alpha (Alpha Based on Fama-French Three Factor Model): Several studies have employed a single factor CAPM or market model to measure the performance of socially responsible and general stocks portfolios. Apart from market risk, there could be other factors as well which may potentially affect the cross section variation in portfolio return like size effect, value effect, momentum effect etc. It can be estimated as:

$$R_P - R_F = \alpha + \beta_1 (R_M - R_F) + \beta_2 (SMB) + \beta_3 (HML)$$

where, α = Multi Factor Alpha
        SMB = Small Minus Big (Size Effect)
        HML = High Minus Low (Value Effect)

8. Information Ratio: It is also known as Appraisal Ratio and is defined as residual return of the portfolio divided by tracking error, where residual return is the difference between the return of the portfolio and the return of a selected benchmark index and tracking error is the standard deviation of residual return. It can be calculated as:

$$\text{Information Ratio} \quad = \quad \frac{E[R_P - R_B]}{\sigma_{\varepsilon p}} \quad = \quad \frac{\alpha_P}{\sigma_{\varepsilon p}}$$

where, α_P = Jensen's alpha or abnormal return of the portfolio
        σ_{ep} = Unsystematic risk of the portfolio

9. Fama's Decomposition Measure: Fama (1972) decomposed the alpha produced by CAPM model into non-diversification, net selectivity and diversification. In terms of Fama's framework, a portfolio's excess return constitutes the following three main components:

(a) Compensation for non-diversification (Systematic risk) = $\beta_p (R_M - R_F)$

(b) Compensation for diversification (Unsystematic risk) = $(R_M - R_F) [(\sigma_P/\sigma_M) - \beta_P]$

(c) Net selectivity = $(R_P - R_F) - (\sigma_P/\sigma_M) (R_M - R_F)$ = Selectivity – Compensation for unsystematic risk

Fama's decomposition takes advantage of the ability to convert risks into their return equivalents. Thus, both return and risk are analysed, but risk is expressed in terms of the return gained or foregone to achieve that level of risk. Selectivity is the portion of the excess return that is not explained by the portfolio beta and the market risk premium. Selectivity includes diversification and net selectivity. Compensation for unsystematic risk is the difference between the return that should have been earned according to capital market line (CML) and the return that should have been earned according to the security market line (SML). If the portfolio is perfectly diversified, this will be equal to zero because there will be no unsystematic risk. We can determine how much of the risk premium comes from ability to select stocks (net selectivity) by subtracting diversification from selectivity.

In order to check whether there is a significant difference between the returns of socially responsible stocks portfolios and general stocks portfolios, we have used t-test. In applying t-test we compare the returns for the whole period as well as for identified boom and recessionary periods.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

where, $\bar{x}_1$ and $\bar{x}_2$ are the returns of two portfolios

S_1 and S_2 are the standard deviations of two portfolios

n_1 and n_2 are the sizes of two portfolios.

To check if there is a significant difference in the alphas and slope (beta values) of different portfolios during the various identified break periods, we have estimated equation (1) in respect of all indices by introducing two dummy variables. One can see that equation (1) is a modified market model equation to capture the impact of break periods i.e. pre-crisis, crisis and post-crisis on various parameters i.e. alpha and slope. The original market model estimates the expected return of a portfolio on the basis of a single factor i.e. market risk premium. The alpha of the model shows return over and above its theoretical expected return while its slope captures the sensitivity of a portfolio's return vis-à-vis market return.

$$R_P - R_F = \alpha_0 + \alpha_1 D_1 + \alpha_2 D_2 + \beta_0 (R_M - R_F) + \beta_1 D_1 (R_M - R_F) + \beta_2 D_2$$
$$(R_M - R_F) \hspace{4cm} (1)$$

where, R_P = Return of ith Index

R_F = Risk - Free Rate of Return

R_M = Return of CNX 500 Equity Index

D_1 = 0 and D_2 = 0 for Pre-Crisis Period

D_1 = 1 and D_2 = 0 for Crisis Period

D_1 = 0 and D_2 = 1 for Post-Crisis Period

α_0 = Excess Return for Pre-Crisis Period in respect of ith Index

$\alpha_0 + \alpha_1$ = Excess Return for Crisis Period in respect of ith Index

$\alpha_0 + \alpha_2$ = Excess Return for Post-Crisis Period in respect i^{th} Index

β_0 = Slope or Beta of ith Index for Pre-Crisis Period

$\beta_0 + \beta_1$ = Slope or Beta of ith Index for Crisis Period

$\beta_0 + \beta_2$ = Slope or Beta of ith Index for Post-Crisis Period

i covers all the four proxies of socially responsible stocks portfolios, as well as general stocks portfolios.

Several studies have employed single factor CAPM model to measure the performance of different portfolios. The intercept of the model (Jensen's Alpha) provides an indication of whether socially responsible portfolios outperform or underperform other portfolios and how much. It is a general trend that market risk alone represents two-third of the total systematic risk of the portfolio/security. To control the factors such as size premium and value premium, which can potentially affect the cross section variation in stock returns, we also estimate the following three factor Fama-French model for the whole period (18 years).

$$R_P - R_F = \alpha + \beta_1 (R_M - R_F) + \beta_2 (SMB) + \beta_3 (HML) \hspace{2cm} (2)$$

Where, β_1, β_2 and β_3 are the slopes in time series regressions. SMB is equally weighted average returns of firms with the lowest 30% market capitalization minus the equally weighted average returns of firms with the highest 30% market capitalization. HML is equally weighted average returns of firms with the highest 30% book-to-market ratios minus the equally weighted average returns of firms with the lowest 30% book-to-market ratios.

In order to check how these three factors viz. market risk premium, size premium and value premium behave during different identified break periods, we have incorporated two dummy variables

(D_1 and D_2) to segregate pre-crisis, crisis and post-crisis in equation (2). Thus, to analyze the impact of break periods on these three factors, we estimate the following regression equation:

$$R_P - R_F = \alpha_0 + \alpha_1 D_1 + \alpha_2 D_2 + \beta_0 (R_M - R_F) + \beta_1 D_1 (R_M - R_F) + \beta_2 D_2 (R_M - R_F) + \beta_3 SMB + \beta_4 D_1 SMB + \beta_5 D_2 SMB + \beta_6 HML + \beta_7 D_1 HML + \beta_8 D_2 HML \tag{3}$$

where,

α_0 = Excess Return for Pre-Crisis Period in respect of ith Index

$\alpha_0 + \alpha_1$ = Excess Return for Crisis Period in respect of ith Index

$\alpha_0 + \alpha_2$ = Excess Return for Post-Crisis Period in respect of ith Index

β_0 = Slope of Market Risk in respect of ith Index for Pre-Crisis Period

$\beta_0 + \beta_1$ = Slope of Market Risk in respect of ith Index for Crisis Period

$\beta_0 + \beta_2$ = Slope of Market Risk in respect of ith Index for Post-Crisis Period

β_3 = Slope of Size Effect in respect of ith Index for Pre-Crisis Period

$\beta_3 + \beta_4$ = Slope of Size Effect in respect of ith Index for Crisis Period

$\beta_3 + \beta_5$ = Slope of Size Effect in respect of ith Index for Post-Crisis Period

β_6 = Slope of Value Effect in respect of ith Index for Pre-Crisis Period

$\beta_6 + \beta_7$ = Slope of Value Effect in respect of ith Index for Crisis Period

$\beta_6 + \beta_8$ = Slope of Value Effect in respect of ith Index for Post-Crisis Period

i covers all the four proxies of socially responsible stocks portfolios as well as general stocks portfolios.

Results and discussion

Table no. 1. Correlation of Different Portfolios

Portfolios	NIFTY	SENSEX	ESG	GREENEX	MIMICKING	BCNSR	SRBC	SRNBC
CNX 500	0.984	0.977	0.967	0.962	0.932	0.974	0.969	0.912
NIFTY		0.991	0.932	0.964	0.878	0.962	0.972	0.853
SENSEX			0.932	0.965	0.868	0.954	0.975	0.852
ESG				0.942	0.963	0.949	0.956	0.978
GREENEX					0.881	0.955	0.973	0.872
MIMICKING						0.916	0.89	0.965
BCNSR							0.946	0.9
SRBC								0.878

Note: All bi-variate correlation coefficients are significant at 1%.

Table no.1 shows the Karl Pearson's coefficient of correlation between different portfolios. SRNBC Stocks Portfolio has lowest degree of correlation with all other portfolios, especially with NIFTY and SENSEX. As per modern portfolio theory, the inclusion of SRNBC stocks portfolio can provide diversification benefits to the investors and help to reduce their portfolio risk.

Table no. 2. Return, Risk and Risk Adjusted Measures of Different Portfolios during Identified Break Periods

PORTFOLIOS	Overall Period	Pre-Crisis Period	During Crisis Period	Post-Crisis Period
	Jan. 05 – Dec. 13	Jan. 05 – Sep. 08	Oct. 08 – Dec. 09	Jan. 10 – Dec. 13
Average (%)				
CNX 500	1.289	1.544	3.180	0.395
NIFTY	1.291	1.581	2.604	0.536
SENSEX	1.344	1.665	2.735	0.528
ESG	1.602	1.683	4.833	0.497
GREENEX	1.971	2.192	4.483	0.923
MIMICKING	1.464	1.849	5.226	-0.168
BCNSR	1.331	1.695	3.878	0.102
SRBC	1.626	1.693	4.272	0.719
SRNBC	1.529	1.706	5.270	0.152

Std. Deviation (%)				
CNX 500	7.884	7.922	13.433	5.177
NIFTY	4.427	7.479	12.142	5.278
SENSEX	7.285	7.314	12.036	5.106
ESG	8.543	7.881	14.981	6.274
GREENEX	7.345	7.135	12.150	5.363
MIMICKING	10.247	9.696	17.281	7.580
BCNSR	8.798	8.125	16.420	5.768
SRBC	7.391	7.145	12.091	5.556
SRNBC	10.124	9.130	17.678	7.788
Coefficient of Variation				
CNX 500	6.118	5.132	4.224	13.108
N-IFTY	5.752	4.730	4.662	9.843
SENSEX	5.419	4.391	4.400	9.667
ESG	5.331	4.682	3.099	12.616
GREENEX	3.727	3.255	2.710	5.812
MIMICKING	6.996	5.243	3.307	-45.226
BCNSR	6.612	4.793	4.234	56.481
SRBC	4.546	4.221	2.830	7.723
SRNBC	6.617	5.351	3.355	51.335
Beta				
CNX 500	1	1	1	1
NIFTY	0.927	0.925	0.898	1
SENSEX	0.903	0.899	0.885	0.957
ESG	1.047	0.946	1.104	1.183
GREENEX	0.896	0.862	0.882	0.994
MIMICKING	1.211	1.099	1.269	1.354
BCNSR	1.087	0.996	1.213	1.072
SRBC	0.908	0.877	0.868	1.055
SRNBC	1.171	0.997	1.283	1.388
Systematic Risk (%)				
CNX 500	7.883	7.922	13.433	5.177
NIFTY	7.308	7.328	12.063	5.177
SENSEX	7.119	7.122	11.888	4.955
ESG	8.254	7.494	14.830	6.125
GREENEX	7.064	6.829	11.848	5.146
MIMICKING	9.547	8.707	17.047	7.010
BCNSR	8.569	7.891	16.295	5.550
SRBC	7.158	6.948	11.660	5.462
SRNBC	9.232	7.898	17.235	7.186
Unsystematic Risk (%)				
CNX 500	0	0	0	0
NIFTY	1.323	1.497	1.386	1.029
SENSEX	1.548	1.664	1.881	1.236
ESG	2.202	2.437	2.116	1.361
GREENEX	2.012	2.067	2.690	1.511

MIMICKING	3.721	4.268	2.837	2.883
BCNSR	1.993	1.938	2.022	1.570
SRBC	1.840	1.667	3.199	1.019
SRNBC	4.154	4.579	3.931	3.002
Sharpe Ratio				
CNX 500	0.0939	0.1290	0.2104	-0.0475
NIFTY	0.0999	0.1416	0.1853	-0.0199
SENSEX	0.1092	0.1564	0.1979	-0.0221
ESG	0.1234	0.1473	0.2990	-0.0229
GREENEX	0.1936	0.2341	0.3399	0.0525
MIMICKING	0.0894	0.1369	0.2819	-0.1067
BCNSR	0.0889	0.1444	0.2146	-0.0934
SRBC	0.1458	0.1639	0.3241	0.0141
SRNBC	0.0969	0.1297	0.2781	-0.0628
Modified Sharpe Ratio				
CNX 500	0.0939	0.1290	0.2104	-0.00013
NIFTY	0.0999	0.1416	0.1853	-0.00006
SENSEX	0.1092	0.1564	0.1979	-0.00006
ESG	0.1234	0.1473	0.2990	-0.00009
GREENEX	0.1936	0.2341	0.3399	0.05252
MIMICKING	0.0894	0.1369	0.2819	-0.00061
BCNSR	0.0889	0.1444	0.2146	-0.00031
SRBC	0.1458	0.1639	0.3241	0.01409
SRNBC	0.0969	0.1297	0.2781	-0.00038
Double Sharpe Ratio				
CNX 500	0.0935	0.1288	0.2092	-0.0474
NIFTY	0.0996	0.1415	0.1842	-0.0198
SENSEX	0.1087	0.1561	0.1966	-0.0221
ESG	0.0799	0.1251	0.3110	-0.0633
GREENEX	0.1489	0.1725	0.3819	0.0318
MIMICKING	-0.0359	-0.0189	0.2476	-0.1874
BCNSR	0.0554	0.1130	0.2282	-0.0964
SRBC	0.1277	0.1654	0.3737	-0.0086
SRNBC	0.0225	0.0664	0.2836	-0.1223
Treynor Ratio				
CNX 500	0.0074	0.0102	0.0283	-0.0025
NIFTY	0.0080	0.0115	0.0251	-0.0010
SENSEX	0.0088	0.0127	0.0269	-0.0012
ESG	0.0101	0.0123	0.0406	-0.0012
GREENEX	0.0159	0.0194	0.0468	0.0028
MIMICKING	0.0076	0.0121	0.0384	-0.0060
BCNSR	0.0072	0.0118	0.0291	-0.0050
SRBC	0.0119	0.0134	0.0451	0.0007
SRNBC	0.0084	0.0119	0.0383	-0.0035
M^2 Measure				

CNX 500	……..	……..	……..	……..
NIFTY	0.0481	0.1004	-0.3363	0.1433
SENSEX	0.1210	0.2170	-0.1680	0.1317
ESG	0.2325	0.1455	1.1907	0.1275
GREENEX	0.7865	0.8330	1.7397	0.5180
MIMICKING	-0.0353	0.0629	0.9613	-0.3062
BCNSR	-0.0393	0.1222	0.0570	-0.2377
SRBC	0.4091	0.2767	1.5276	0.3191
SRNBC	0.0241	0.0060	0.9095	-0.0792
Single Factor Jensen's Alpha (%)				
CNX 500	0	0	0	0
NIFTY	0.0568	0.1143	-0.2881	0.1415
SENSEX	0.1270	0.2247	-0.1217	0.1226
ESG	0.2783*	0.1938	1.3590**	0.1471
GREENEX	0.7582***	0.7896***	1.6331**	0.5262**
MIMICKING	0.0194	0.2047	1.2876	-0.4753
BCNSR	-0.0227	0.1560	0.1008	-0.2751
SRBC	0.4046**	0.2749	1.4626*	0.3375**
SRNBC	0.1145	0.1658	1.2944	-0.1481
Multi Factor Jensen's Alpha (%)				
CNX 500	0	0	0	0
NIFTY	0.1211	0.2011	-0.2035	0.0516
SENSEX	0.1811	0.3188	-0.1167	-0.0334
ESG	0.3128*	0.0333	1.2468**	0.5184***
GREENEX	0.8461***	0.8838***	1.9331***	0.4470*
MIMICKING	-0.0776	-0.1398	1.0472	-0.0411
BCNSR	0.0791	0.2815	0.0569	-0.2960
SRBC	0.5890***	0.4083*	1.5690*	0.4343***
SRNBC	0.0536	-0.2642	0.9339	0.5474
Information Ratio				
CNX 500	………	………	………	………
NIFTY	0.0427	0.0763	-0.2073	0.1373
SENSEX	0.0823	0.1353	-0.0635	0.0992
ESG	0.1267	0.0799	0.6423	0.1083
GREENEX	0.3773	0.3821	0.6086	0.3483
MIMICKING	0.0053	0.0479	0.4533	-0.1649
BCNSR	-0.0112	0.0803	0.0474	-0.1752
SRBC	0.2202	0.1649	0.4582	0.3318
SRNBC	0.0276	0.0362	0.3282	-0.0492

***significant at 1% **significant at 5% *significant at 10%

Table no. 2 shows that socially responsible portfolios generated higher return than that of general stocks portfolio and market portfolio during the overall period and identified break periods (especially during

crisis). GREENEX generated the highest monthly average return of 1.97%, 2.19% and 0.92% during 9 year period, pre-crisis and post-crisis period respectively. However, during crisis period SRNBC stocks portfolio generated the highest return of 5.27% per month followed by ESG Index. If we consider standard deviation, systematic risk and unsystematic risk, we find that socially responsible portfolios are the most risky portfolios among all other available portfolios. Systematic risk cannot be eliminated with diversification since it is attributable to broad macro factors, but unsystematic risk can be reduced to its minimum with the level of diversification. When we look at the coefficient of variation (a relative measure of risk), we find that GREENEX had the least coefficient which demonstrates that it is the most defensive portfolio among all other portfolios. Higher beta for ESG Index and SRNBC stocks portfolio exhibits that these two portfolios are more sensitive to market conditions than NIFTY, SENSEX and other portfolios.

During the entire study period of 9 years and different identified break periods, socially responsible stocks portfolios outperformed general stocks portfolios and market portfolio in terms of different risk-adjusted measures used. Higher risk in socially responsible stocks portfolios generated higher returns and as a result higher Sharpe ratio, which indicates highest return per unit of total risk. In all the periods, GREENEX produced the highest coefficients of Sharpe ratios as compared to other portfolios/indices. Because of the negative excess return limitation of Sharpe ratio, results of Modified Sharpe ratio were also in favor of socially responsible stocks portfolios. Their values give no useful insight and should only be used as a ranking criterion (Israelsen, 2005). Moreover, the results of Double Sharpe ratio were also in favor of socially responsible portfolios and indicate that these portfolios could be safer for the investors during all the identified break periods, especially in crisis. Similarly, high Treynor ratio of socially responsible portfolios demonstrates the highest return per unit of total systematic risk. M^2 measure concludes that on creating portfolios with the same level of risk equivalent to market portfolio (CNX 500), all the proxies of socially responsible portfolios (especially GREENEX) generated positive values which further describes that these proxies produced returns higher than that of market index and their general counterparts. Positive and significant high single factor and multi-factor Jensen's alpha signifies that socially responsible portfolios are

generating highest abnormal returns. Once again it is the GREENEX that produced highest single and multi-factor alpha of 1.63% and 1.93% per month, respectively during crisis period. It is interesting to note here that only proxies of socially responsible portfolios are generating significantly higher Jensen's alpha. It infers that apart from market risk premium, size premium and value premium, there could be other factors which may affect the returns of socially responsible companies. Similarly, a high information ratio shows that an investor can reap the benefit of higher returns more efficiently by taking on additional risk. Thus, we can say that socially responsible companies are well rewarding during various identified break periods mainly in crisis.

Table no. 3. Fama's Decomposition Results during Identified Breaks

Portfolios	Risk Premium (%)	Risk Premium due to (%)				Ranking on the basis of
Overall Period (Jan. 05 – Dec. 13)		Systematic Risk	Selectivity	Unsystematic Risk	Net Selectivity	Net Selectivity
NIFTY	0.743	0.686	0.057	0.011	0.045	5
SENSEX	0.796	0.668	0.127	0.016	0.112	4
ESG	1.054	0.775	0.279	0.027	0.252	3
GREENEX	1.422	0.663	0.759	0.026	0.733	1
MIMICKING	0.916	0.896	0.020	0.066	-0.046	8
BCNSR	0.782	0.805	-0.022	0.021	-0.044	7
SRBC	1.077	0.672	0.405	0.022	0.384	2
SRNBC	0.981	0.867	0.115	0.084	0.031	6
Pre-Crisis Period (Jan. 05 – Sep. 08)						
NIFTY	1.059	0.945	0.114	0.020	0.095	6
SENSEX	1.144	0.919	0.225	0.025	0.200	3
ESG	1.161	0.967	0.195	0.050	0.145	4
GREENEX	1.670	0.881	0.790	0.039	0.750	1
MIMICKING	1.328	1.123	0.205	0.128	0.077	7
BCNSR	1.173	1.018	0.156	0.030	0.125	5
SRBC	1.171	0.896	0.275	0.025	0.250	2
SRNBC	1.184	1.019	0.166	0.159	0.007	8
During Crisis Period (Oct. 08 –Dec. 09)						
NIFTY	2.250	2.538	-0.287	0.017	-0.304	8
SENSEX	2.382	2.501	-0.119	0.031	-0.151	7

ESG	4.479	3.120	1.359	0.032	1.328	3
GREENEX	4.129	2.492	1.637	0.063	1.573	1
MIMICKING	4.872	3.586	1.286	0.049	1.237	4
BCNSR	3.524	3.428	0.096	0.026	0.070	6
SRBC	3.919	2.453	1.466	0.091	1.375	2
SRNBC	4.916	3.626	1.290	0.093	1.197	5
Post-Crisis Period (Jan. 10 – Dec. 13)						
NIFTY	-0.105	-0.246	0.141	-0.005	0.146	4
SENSEX	-0.113	-0.236	0.123	-0.007	0.130	5
ESG	-0.144	-0.291	0.147	-0.007	0.154	3
GREENEX	0.282	-0.245	0.526	-0.010	0.537	1
MIMICKING	-0.809	-0.333	-0.475	-0.027	-0.448	8
BCNSR	-0.539	-0.264	-0.275	-0.010	-0.265	7
SRBC	0.078	-0.260	0.338	-0.004	0.342	2
SRNBC	-0.489	-0.342	-0.148	-0.029	-0.119	6

Table no. 3 shows the results of Fama's Decomposition Measure. Socially responsible stocks portfolios generated the highest risk premiums among all other portfolios. It shows that return of socially responsible companies are higher than the return of general companies and as a result shows higher risk premiums for them. It is to be noted here that socially responsible portfolios provided much higher compensation for non-diversification to the investors as compared to other portfolios, because of the fact that these portfolios are less diversified as compared to general portfolios. They are less diversified because the majority of socially responsible companies are from IT and banking. During the overall period, SRNBC portfolio provided 0.08% per month as compensation for unsystematic risk as against 0.01% and 0.02% for NIFTY and SENSEX. However, the more interesting point to note here is that all the socially responsible portfolios provided positive net selectivity returns in the whole period as well as in all the identified break periods. This indicates that compromise made by investors with respect to less diversification benefits by investing in socially responsible companies was well rewarded in terms of higher returns. Thus, socially responsible portfolios are given the first ranking when we rank all available portfolios on the basis of net selectivity. Therefore, it proves that socially responsible companies can be used to build up protective and better performing portfolios (specifically in crisis) by socially responsible investors in India.

Table no. 4. Comparative Performance: Results of t-test during
Identified Break Periods

Pairs	Differential Return (%)			
	Overall Period	Pre-Crisis Period	Crisis Period	Post-Crisis Period
ESG – CNX 500	0.314 (0.125)	0.139 (0.671)	1.653** (0.023)	0.102 (0.671)
ESG – NIFTY	0.311 (0.281)	0.102 (0.821)	2.229* (0.057)	-0.039 (0.904)
ESG – SENSEX	0.258 (0.373)	0.017 (0.969)	2.098* (0.054)	-0.031 (0.932)
ESG – MIMICKING	0.138 (0.623)	-0.166 (0.725)	-0.393 (0.615)	0.665* (0.058)
ESG - BCNSR	0.272 (0.288)	-0.012 (0.978)	0.955 (0.249)	0.395 (0.191)
GREENEX – CNX 500	0.682*** (0.001)	0.649** (0.041)	1.303 (0.127)	0.528** (0.019)
GREENEX - NIFTY	0.680*** (0.000)	0.611** (0.030)	1.879** (0.015)	0.386* (0.075)
GREENEX - SENSEX	0.626*** (0.001)	0.527** (0.041)	1.748** (0.022)	0.394* (0.098)
GREENEX - MIMICKING	0.506 (0.282)	0.343 (0.641)	-0.743 (0.683)	1.090* (0.060)
GREENEX - BCNSR	0.640** (0.014)	0.497 (0.139)	0.605 (0.681)	0.821*** (0.003)
SRBC – CNX 500	0.337* (0.063)	0.149 (0.564)	1.092 (0.266)	0.324** (0.040)
SRBC – NIFTY	0.335** (0.038)	0.112 (0.628)	1.668** (0.040)	0.183 (0.233)
SRBC – SENSEX	0.282* (0.064)	0.027 (0.902)	1.537** (0.012)	0.191 (0.312)
SRBC – MIMICKING	0.161 (0.723)	-0.156 (0.825)	-0.954 (0.619)	0.887* (0.086)
SRBC – BCNSR	0.295 (0.284)	-0.002 (0.995)	0.395 (0.813)	0.617** (0.024)
SRNBC – CNX 500	0.241 (0.547)	0.163 (0.790)	2.089 (0.162)	-0.243 (0.643)
SRNBC – NIFTY	0.239 (0.630)	0.125 (0.868)	2.665 (0.182)	-0.384 (0.534)
SRNBC - SENSEX	0.185 (0.710)	0.041 (0.956)	2.534 (0.195)	-0.376 (0.567)
SRNBC – MIMICING	0.065 (0.792)	-0.143 (0.749)	0.043 (0.918)	0.319 (0.281)
SRNBC - BCNSR	0.199 (0.623)	0.011 (0.987)	1.392 (0.196)	0.049 (0.923)

***significant at 1% **significant at 5% *significant at 10%
Note: Figures in parentheses shows p-value.

In Table no. 4 we have compared the returns of socially responsible portfolios with general portfolios and market portfolio. Over the total studied period, all the portfolios of socially responsible companies generated higher return than those of general companies' portfolio and market portfolio, but only GREENEX and SRBC stocks portfolio generated significant differential returns.

Even in the various identified break periods, socially responsible companies produced higher returns than other portfolios, but difference was not statistically significant for all of them. During the pre-crisis period, the return of GREENEX was significantly higher by 0.61% per month or 7.32% annually (p-value < 0.05) than the return of NIFTY. During the crisis period, the results were promising because all portfolios of socially responsible companies generated significantly higher returns than the portfolio of general companies and market portfolio (except SRNBC stocks portfolio). ESG provided return higher by 2.23% per month or 26.76% annually (p-value < 0.10) than the return of NIFTY. It is to be noted here that out of three significant portfolios of socially responsible companies, ESG produced significantly higher returns than other portfolios during the crisis period followed by GREENEX. During the post-crisis period as well, GREENEX again outperformed the portfolio of general companies and market portfolio and the difference was statistically significant. This shows greater commitment of investors towards investing ethically and protecting environment in India. Thus, investors are well rewarded for being socially responsible (in terms of higher returns) in the Indian stock market.

Table no. 5. Alpha and Slope using Market Model in different Identified Break Periods

Portfolios	Pre-Crisis Period		Crisis Period		Post-Crisis Period	
	Alpha (α_0)	Slope (β_0)	Alpha ($\alpha_0 + \alpha_1$)	Slope ($\beta_0 + \beta_1$)	Alpha ($\alpha_0 + \alpha_2$)	Slope ($\beta_0 + \beta_2$)
NIFTY	0.00114	0.925***	-0.00288	0.898	0.00141	1.001*
SENSEX	0.00225	0.899***	-0.00122	0.885	0.00123	0.956
ESG	0.00194	0.947***	0.01359**	1.104***	0.00147	1.182***
GREENEX	0.00789***	0.862***	0.01633*	0.883	0.00526	0.993**
MIMICKING	0.00205	1.099***	0.01288	1.268*	-0.00475	1.354**
BCNSR	0.00156	0.996***	0.00101	1.212***	-0.00275	1.072
SRBC	0.00275	0.877***	0.01462**	0.869	0.00337	1.053***
SRNBC	0.00166	0.997***	0.01294*	1.281***	-0.00148	1.387***

***significant at 1% **significant at 5% *significant at 10%

Table no. 5 shows the results of dummy variable regression model to check the impact of break periods on the parameters of market model. During the pre-crisis period, alpha values of all the portfolios were positive but significantly highest for GREENEX only. However, during the crisis period all the proxies of socially responsible portfolios are showing positive and significant alphas. GREENEX is generating the highest excess return of 1.63% per month or 19.56% annually. Alpha values for NIFTY and SENSEX were negative and insignificant during this period. None of the portfolio is generating significant alpha value in the post-crisis period. This signifies that apart from market risk premium, there could be some other factors in determining the portfolio return in case of socially responsible companies during the crisis period (especially GREENEX). It is interesting to mention here that all the socially responsible portfolios are producing significant positive excess returns during the crisis period, only which denotes that there is a heavy demand for stocks of socially responsible companies during the crisis period thus, pushing their prices up and hence providing higher and significant returns accordingly. Alpha value of general companies (NIFTY and SENSEX) was negative during the crisis period because the security prices of general companies had fallen severely at that time and thus giving negative excess returns.

In the pre-crisis period, as per modern portfolio theory, the slope is significant for all the eight portfolios. Further, in the crisis period, differential slope is significant for four portfolios (ESG, Mimicking, BCNSR and SRNBC) only. This implies that during the crisis period, there has been a significant shift in slope of these portfolios. It is clearly evidenced from the above mentioned table that in the post-crisis period, differential slope is significant for all socially responsible portfolios. It is the SRNBC stocks portfolio that generated highest significant slope during the crisis (1.281) and post-crisis periods (1.387). Thus, we can say that during adversity i.e. crisis, investors put more faith on socially responsible companies and as a result, impact of crisis has been highly positive in the case of socially responsible companies (in terms of alpha and slope).

Table no. 6. Results of Fama-French Three Factor Model for 9 Year Period

Portfolios/Indices (Equation 2)	Multi Factor Alpha (α)	Market Risk Premium (β₁)	Size Effect (β₂)	Value Effect (β₃)
NIFTY	0.00121	0.966***	-0.093***	-0.062**
SENSEX	0.00181	0.943***	-0.084**	-0.067*
ESG	0.00313*	0.967***	0.045	0.202***
GREENEX	0.00846***	0.932***	-0.110**	-0.041
MIMICKING	-0.00078	1.041***	0.245***	0.352***
BCNSR	0.00079	1.091***	-0.093*	0.036
SRBC	0.00589***	0.917***	-0.170***	0.062
SRNBC	0.00054	0.993***	0.220***	0.384***

***significant at 1% **significant at 5% *significant at 10%

Table no. 6 discusses the result of Fama-French three factor model. In table no. 2 we reported that Single Factor Jensen's alpha of all the socially responsible portfolios were statistically significant. It suggests that apart from market risk (single factor in market model) there could be other factors as well which may affect the excess return of socially responsible portfolios. The results of Fama-French three factor model shows that after controlling the market risk, size premium and value premium as well, alphas of all the socially responsible portfolios (except SRNBC) is coming out to be positive and statistically significant. GREENEX is showing the highest significant abnormal return of 0.85% per month (10.2% p.a.). It is interesting to note here that although all the portfolios of general stocks are also showing positive alphas, but none of them were statistically significant. The beta values for size premium of different portfolios were significant (except of ESG) which shows that small size firms are more able to determine the excess return of the portfolios than large size firms. Significant positive result for value premium in case of socially responsible companies shows that the high growth firms or firms having high book-to-market ratios are more able to determine the excess return of the portfolios than the low growth firms. However, the results were opposite in the case of general companies (NIFTY and SENSEX) i.e. firms having low book-to-market ratios are able to determine the excess return of the portfolios.

Table no. 7. Impact of Break Periods on Fama-French Three Factor Model

Portfolios/ Indices (Equation 3)	Pre-Crisis Period				Crisis Period				Post-Crisis Period			
	Multi Factor Alpha (%)	Market Risk Premium	Size Effect	Value Effect	Multi Factor Alpha (%)	Market Risk Premium	Size Effect	Value Effect	Multi Factor Alpha (%)	Market Risk Premium	Size Effect	Value Effect
NIFTY	0.201	0.950***	-0.091**	-0.078*	-0.203	0.931	-0.114	0.002	0.052	1.090***	-0.048	-0.139
SENSEX	0.319	0.926***	-0.099**	-0.084	-0.117	0.888	-0.096	0.057	-0.033	1.073**	-0.024	-0.191
ESG	0.033	0.910***	0.161***	0.101	1.247**	1.061***	0.091	0.035	0.518	1.037*	-0.150***	0.280*
GREENEX	0.884***	0.888***	-0.098*	-0.08	1.933*	0.998*	0.015	-0.263	0.447	1.038**	0.012	-0.077
MIMICKING	-0.139	1.008***	0.356***	0.278**	1.047	1.175**	0.356	-0.025	-0.041	1.014	0.091	0.553*
BCNSR	0.281	1.021***	-0.123**	-0.065	0.057	1.195***	-0.04	0.063	-0.296	1.062	0.037	0.008
SRBC	0.408*	0.892***	-0.121**	-0.008	1.569**	0.911	-0.202	0.039	0.434	1.059**	-0.107	0.015
SRNBC	-0.264	0.914***	0.419***	0.199*	0.934	1.143**	0.361	0.073	0.547	1.051	-0.181***	0.608**

***significant at 1% **significant at 5% *significant at 10%

Table no. 7 demonstrates that even with the use of three factor asset pricing model, socially responsible stocks portfolios are able to generate positive excess returns (or alphas) in all the three identified break periods, whereas portfolios of general companies did not. During crisis period, GREENEX and SRBC stocks portfolio generated the highest statistically significant abnormal return of 1.93% and 1.57% per month respectively. A closer look at the results also reveals that market is a significant factor in explaining cross sectional variations in stock returns in all the periods. On the other hand, size effect is a significant factor only in the pre-crisis period. Value effect is not a significant factor in explaining variation in stock returns. Thus, our results are in conformity with the existing literature which evidenced the supremacy of market factor in explaining cross sectional variations in returns.

Conclusions

This paper addresses an interesting notion as to whether the investor who considers ESG and ethical issues in their investment decisions has to sacrifice financial return or not. It examined the performance of four socially responsible stocks portfolios (viz. ESG, GREENEX, SRBC and SRNBC)

vis-à-vis general stocks portfolios (NIFTY, SENSEX, BCNSR and Mimicking), as well as market portfolio (CNX 500 Equity Index) using market model, Fama-French three factor model and various risk-adjusted measures during different identified break periods. In line with Kempf & Osthoff (2007), Hume & Larkin (2008), Tripathi & Bhandari (2012, 2015), it is found that crisis has a significant and positive impact on socially responsible companies. Proxies of socially responsible portfolios generated significantly higher return and outperformed general and market portfolio in terms of all risk-adjusted measures during crisis period. The result of Fama's decomposition measure demonstrates that socially responsible portfolios outpaced other portfolios even on the basis of net selectivity return during identified break periods. It means that even with less diversification benefits, socially responsible portfolios are managed to produce sufficient higher returns. Using market model and Fama-French three factor model, the impact of crisis was significant enough for socially responsible portfolios which are producing significant positive and higher alphas than other portfolios. Thus, besides augmenting existing literature, our results clearly corroborate the fact that investors can derive benefits by investing in socially responsible companies (especially in crisis period). Our results are more promising than the results of Hamilton et al. (1993), Gregory et al. (1997) and Statman (2000).

However, the study is not free from certain limitations. Due to non-existence of the ESG Index prior to 2007 and GREENEX Index prior to 2012 consistency of the results may get affected. As a result, the previous data before 2007 onwards is based on the companies in the indices which may not provide a true picture. Second, this study is entirely based on the

vis-à-vis general stocks portfolios (NIFTY, SENSEX, BCNSR and Mimicking), as well as market portfolio (CNX 500 Equity Index) using market model, Fama-French three factor model and various risk-adjusted measures during different identified break periods. In line with Kempf & Osthoff (2007), Hume & Larkin (2008), Tripathi & Bhandari (2012, 2015), it is found that crisis has a significant and positive impact on socially responsible companies. Proxies of socially responsible portfolios generated significantly higher return and outperformed general and market portfolio in terms of all risk-adjusted measures during crisis period. The result of Fama's decomposition measure demonstrates that socially responsible portfolios outpaced other portfolios even on the basis of net selectivity return during identified break periods. It means that even with less diversification benefits, socially responsible portfolios are managed to produce sufficient higher returns. Using market model and Fama-French three factor model, the impact of crisis was significant enough for socially responsible portfolios which are producing significant positive and higher alphas than other portfolios. Thus, besides augmenting existing literature, our results clearly corroborate the fact that investors can derive benefits by investing in socially responsible companies (especially in crisis period). Our results are more promising than the results of Hamilton et al. (1993), Gregory et al. (1997) and Statman (2000).

Our findings support the view that SRI in anyway is not a penalty for investors in India. These findings have important implications for companies, investors, regulators, policy makers and mutual funds. General companies should change their attitude and agenda towards social responsibility. Due to significant higher returns in the crisis period, socially responsible stocks portfolio can be used to build up defensive and better performing portfolios by socially responsible investors in India. Thus, investors should put more faith on socially responsible companies and start investing in these companies. We suggest that regulators, policy makers and mutual funds should construct and make available various socially responsible investment products to initiate the movement of SRI in India. The policy makers can also push financial sector reforms in the direction of SRI for better and effective implementation of CSR law.

However, the study is not free from certain limitations. Due to non-existence of the ESG Index prior to 2007 and GREENEX Index prior to 2012 consistency of the results may get affected. As a result, the previous data before 2007 onwards is based on the companies in the indices which may not provide a true picture. Second, this study is entirely based on the

Indian market with no consideration of socially responsible or ethical funds in the international markets.

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Smartphones - a powerful Tool for Tourism. Romanian Travel Apps

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Abstract
Smartphones are an integral part of everyday life, and more people buy the latest technology, including tourists. Technology evolves at an exponential pace, smartphones are increasingly becoming an indispensable accessory and less a luxury item, like it might have been considered before. The smartphones are now a powerful tool for tourists and travelers, thanks to the mobile applications that help so much the independent travelers.
Keywords: tourism, travel, smartphone, mobile phone, Internet

Introduction

Technology is essential in today's tourism. Today's tourist is an informed person, who wants to travel fast, to be able to communicate instantly and to make online reservations and also pay online - he is changing his wishes and expectations very often and tries to adapt to the market shifts swiftly.

Smartphone can guide the tourist through the city; help him to find the best locations and sights/means of transport. Tourists now are

able to combine social media and smartphone technology to send photos and share impressions on various sites, like e. g. Facebook, post comments, upload videos on You Tube, and update their own blogs while traveling.

Smartphones ability to unite people in giving them access to new databases and information quickly became a valuable instrument for the tourists. Smartphones are thus an inevitable partner for tourism, while tourism itself became a fertile ground for mobile computing (Dickinson et al, 2014)

Literature review

Smartphones and fast mobile Internet access have transformed nearly all facets of life, while travel experienced some of the most dramatic changes. Today's smartphones and apps can translate words live on screen, give real-time transportation advice, locate you anywhere in the world, act as your boarding pass, book your dinner reservation, and even help you find a cheap, last-minute hotel room (Business Insider, 2013)

Growth in smartphone ownership continues in 2015 according to Ofcom (Ofcom, 2015). Spain reported the highest take-up at 83%, an increase of 6pp in 2014. UK smartphone take-up stood at 67%, an increase of 4pp in the previous year. Two countries reported the same levels of take-up as last year; 77% of respondents in Japan and 69% in Australia claimed to use a smartphone. The US had the lowest take-up of smartphones (57%).

As the society has become networked, and networks have become ubiquitous through the use of mobile telephones, societal practices are undergoing a radical transformation, no more so than in the domain of travel. (Dickinson, et al, 2014)

At this moment there are about 2.6 billion smartphone subscriptions in the world. Among the smartphone users, about 80% use them every day, surfing also the internet, and more than 60% use apps and are accessing social media from a smartphone. (Frâncu, 2013)

Recent studies show that smartphones and their applications have the potential to assist travelers by providing easy access to information anytime and (almost) anywhere (Wang, Park, Fesenmaier, 2012)

OWNERSHIP AND PERSONAL USE OF SMARTPHONES
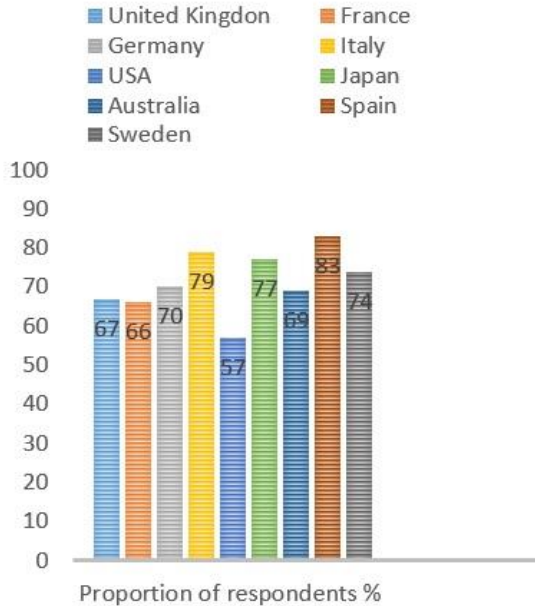
Source: Ofcom, 2015

Inexpensive Smartphones are opening new opportunities for marketing and commerce in emerging markets, where many consumers previously had no access to the internet. (eMarketer, 2014). Mobile phones are already an everyday reality for most people. Smartphones will become a necessity and even a habit in the very near future.

Table no. 1. Worldwide mobile and smartphone subscriptions

Mobile subscription essentials	2014	2015	2021 forecasts
Worldwide mobile subscriptions (million)	7,100	7,400	9,100
Smartphone subscriptions (million)	2,600	3,400	6,400

Source: Ericsson Mobility Report, 2015

Research

Just as the Internet completely revolutionized the way consumers book travel, now the immense, growing reliance on mobile devices is causing a second shift in how travel is purchased. Today, rarely anyone leaves their home without their mobile phone, and twice as many people are using SMS globally compared to email. It is imperative for hotels to tap into this growing market. (Rusu, Cureteanu, 2009)

Transport apps

Available for Android and iPhone, Paravion app allows the tourist to make reservations for various flight options and to choose the most convenient one considering its price and time schedule. Ticketing is free. The customer will have to pay only if he decided to buy the ticket, the confirmation for the reservation and ticket issuance are included in the package. (Paravion Tour, 2016)

Avion.ro is designed to be fully functional on mobile devices. Site functionality is tailored to the needs of mobile users and adapted for touchscreen. It works on Android, iPhone and iPad. (Avion.ro, n.d.)

TAROM customers can book and purchase tickets, online and on smartphone. The customers can book trips on mobile phones equipped with operating systems like iOS, Android or Windows Phone. If accessing TAROM website from a mobile phone, it automatically detects the type of mobile device used and redirects the user to the mobile phone version and it is not necessary to install a dedicated application on smartphone for booking. (TAROM, n.d.)

Wizz Air launched in Romania a free application for iPhone and iPad, for reservations and services. With the help of the application, customers can buy tickets, can change a reservation, can add services or consult flight schedule. Over several weeks, users can and do check-in online.

For ticket reservation is necessary for the user to log in and be a member of Wizz Discount Club, which has a fee of 135 RON/year. The other options of the application can be accessed without having to login. (yoda.ro, 2013)

There are other similar sites for booking flights online in Romania like bileteavion.ro, momondo.ro, ro.airtickets.com, esky.ro, vola.ro, decoleaza.ro, skyscanner.ro, airpass.ro, zbori.ro, decoleaza.ro, tripsta.ro etc.

If the smartphone user doesn't intend to travel by plane, he could easily go by train, and thus use the Mersul Trenurilor CFR Călători pentru mobile (CFR Timetable for mobile phones). With this application customers can get information about the timetable in a format suitable for mobile devices with a smaller data transfer, which leads to a more rapid access to train schedules. (CFR Călători, 2012)

At the same time for the passengers who purchase tickets through the CFR Online Tickets app it is not necessary to print the travel document, the person identification being performed with the electronic ticket itself or with the ID card of the customer.

In Romania there is also InfoAutogari app, which shows the timetable information for all buses and coaches, detailing the date and place of departure and destination, and the company operating on that route with its contact details. (Autogari.ro, 2013)

In Timişoara customers have the opportunity to learn about routes and arrival times of each bus or tram by using the Public Transport – Timisoara application. Arrival times shown are calculated in real time through GPS devices installed in each vehicle. The application connects to Regia de Transport Timişoara (RATT) servers to get arrival times and display them in a format optimized for Android phones and tablets. (Balint, 2015)

Public Transport Company (CTP) Cluj launched a mobile application, Bus CTP Cluj - Napoca, through which customers can buy tickets on public transport, mobile payment helps to simplify the travel due to the permanently available digital wallet on smartphone.

Also in Cluj, an interactive application - Cluj Bus, was launched officially in 2015. Translated into four languages it aims to facilitate the way users are traveling by public transport in Cluj-Napoca, and encourage them to use this system of transport. It is available in four languages (Romanian, French, German, English), and it allows users to keep up with the stops and points of interest around them, as well as available bus lines. The application is compatible with iOS 6.0 on iPhone, iPad and iPod touch, and is optimized for iPhone 5, iPhone 6 and iPhone 6 Plus. (Cluj Bus, 2015)

Auto.ro is another interesting application for drivers, helping them to buy road vignette at any time, to pay traffic fines, to acquire car insurance, to buy travel insurance depending on the country of destination and even contact an auto service if having problems with the car. (Auto.ro, n.d.)

Accommodation apps

Cazare România provides access to a database with information about hotels, hostels, lodges and holiday homes. The tourists can search on the map for the place they want to go or the accommodations and touristic attractions nearby, they can read the reviews or see the costs, book directly from the app, ask offers or call the accommodations. (Infoturism Media SRL, 2014)

With Tourist Informator - Romania (by Refero Group Software), the tourist can discover the most popular destinations in Romania. It has a route planning added, an integrated map for easier navigation, and is a multilingual iPad and smartphone platform in Romanian, Hungarian, English and German language. (Refero Group Software, 2013)

MoBooking Romania is another Romanian app, offered by Teen Telecom, which is able to show more than 250,000 accommodations worldwide, and compare deals on over 120,000 destinations. (TeenTelecom, 2012)

Various travel apps

Harta Romaniei (Romania map) application can be used as a GPS navigator; the traveler does not need internet connection to view the map. It can be used as a tourist guide to easily find interesting places in Romania, containing a detailed list of points of interest for tourists, accommodation options, parking locations, restaurants, bars, clubs, cinemas, theaters, auto services, fuel stations, shops, parks, schools, hospitals or areas dedicated to sport. Includes detailed maps of major cities in Romania: Bucharest, Iaşi, Cluj-Napoca, Timişoara, Constanţa, Craiova, Galaţi, Braşov, Ploieşti, Brăila, Oradea, Bacău, Arad, Piteşti, Sibiu, Târgu Mureş, Baia Mare, Buzău, Satu Mare, Botoşani, Râmnicu Vâlcea and others. (Mapedy, 2015)

Asociația Prietenii Muzeului Național de Istorie a României (APMNIR) in partnership with the National Heritage Institute (National Database of Museums and Collections in Romania - http://ghidulmuzeelor.cimec.ro) and the Romanian National Committee of ICOM (International Council of Museums) have developed the "Museums and Collections of Romania" bilingual (Romanian and English) application, which provides information (address, opening hours, telephone, web site, description) about all of Romania's 1014 museums, and more than 5200 photographs. Various search filters are available, allowing the selection by name, category (archaeology and

history, art, religious art, ethnography, memorial, natural sciences, science and technology), locality, county, historical region (Banat, Bucovina, Crişana, Dobrogea, Maramureş and Sătmar, Moldova, Muntenia, Oltenia, Transilvania) or distance from the user's current position. The museums can also be displayed on the map or in an augmented reality module. As the database is stored locally, an Internet connection in only necessary for accessing photographs, maps and navigation related features. (APMNIR, 2013)

A team from Romania released an app for sightseeing the cities located on an interactive map. CeSăVezi is dedicated to those who want to discover the city by walking on foot to the most interesting targets. The application has options for accommodation, bars and restaurants, but also for the state of the roads. It also has a menu to find out the weather in real time. (Proactive HR Profile, 2013)

With the Redescoperă România (Rediscover Romania) app the tourist can find various destinations in the country. The app offers access to a database of places waiting to be discovered and the tourist can establish a route and find brief information about different tourist attractions from a list and see how to get to them. (Breeze Mobile Marketing SRL, 2013)

Salvamont is the official app of the National Mountain Rescue Association in Romania (Asociația Națională a Salvatorilor Montani din România - A.N.S.M.R.), conducted in partnership with Vodafone Romania. With the help of this app the tourist can plan his hiking time, being aware of the most important weather warnings, with the latest information about weather, hiking trails, contacts, facilities and locations of chalets and slopes in the region. During the trip, even without Internet access, the tourist has access to the map to locate chalets around him or to guide him on the mountain.

Most importantly, in the SOS section there is a phone position locator service available that can notify Salvamont rescue dispatcher in real time about the route, coordinates, altitude, and even phone battery level. (Vodafone România, 2014)

Conclusions
Global smartphone sales now comfortably pass one billion handsets per year. They have become an integral part of life for large swathes of the world's population, particularly in more developed societies. (Ofcom, 2015)

There are an increasing number of self-dependent tourists who are traveling by themselves, using the smartphone applications as their main guide.

Consumer behavior for tourism services in Romania is changing extremely rapidly. At the same time, more Romanian tourists are constantly using mobile phones or tablets for online reservations or to purchase travel packages.

The mobile applications market for tourism services in Romania is also growing at a rapid pace. Country travelers have access to high-performance mobile applications, which can help locate the best restaurants, bars, hotels, or accommodation in general, across the world, buy plane, train or bus tickets, find museums, theaters, cinemas, shops or other places to visit etc.

The studies in the field of tourism still have much to understand regarding the complex implications of occurring changes caused by the evolving mobile technology.

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Academic Employees' perceptions of Work - Life Balance practices: A Case Analysis of Private Universities in Ogun State, Nigeria

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Abstract
This study investigates academic employees' perceptions and experiences of work–life balance (WLB) in private Universities in Ogun State. A descriptive research design involves in-depth interviews among 129 academic employees in private Universities in Ogun State. Specifically, the main objectives are to critically examine the practices of work-life balance in the Universities. The study assesses the types of WLB policies and practices within the Universities and factors which influence the employee's perception of work-life balance within the framework of employment relationship in the various Universities in Nigeria. Using spill-over theory, the findings reveal various dimensions in the academic employees' concept of WLB and show that academic employee experience the strain of work intensification and long hours of work. There is a wide gap between corporate WLB practices and the academic employee understanding of WLB. The paper suggests policy implications which would aid the implementation of WLB

policies within Private Universities and suggests directions for future research.

Keywords: employees, academics, perception, work life, job satisfaction and commitment

Introduction

The term Work-life balance is used to describe policies and initiatives that enable academic employee to combine paid work and non-paid work (Gamble, Lewis and Rapoport, 2006). The purpose of this study is to explore the experience of work-life balance policies and practices within the Private Universities in Ogun State. The choice of this sector is rooted in the fact that Private Universities are a fast growing sector in Nigeria. They are only a few research conducted in the context of Africa and in particular Nigeria on the concept of work life balance (WLB) (Mordi and Ojo, 2011; Mordi, Mmieh and Ojo, 2012). A few organizations in Nigeria have started initiating WLB initiatives in the workplace. However, the majority of the organizations are still indifferent in adopting WLB practices despite the benefits they stand to gain (Epie, 2011). This is a significant gap in the literature given the move towards the globalization of human resources management best practices. It is also important to note that WLB policies and practices cannot be diffused directly from developed countries to less developed countries without taking into consideration both, institutional and cultural difficulties (Mordi, Mmieh and Ojo, 2012).

As a result of the changing work milieu, many workers increasingly work long hours, feel more pressured in their jobs and there is increasingly a lean demarcation between work and non-work. Consequently, workers have increasingly struggled to maintain a healthy balance in their lives, making work and non-work aspects of life too difficult to manage (Redman and Wilkinson, 2009), and creating the necessity for WLB (Parris, Vickers and Wilkes, 2008), hence making work-life balance debate more important among governments, practitioners and the academic personnel.

Work-life balance affords employees the ability to "strive to achieve greater balance between work and home responsibilities" (Murphy and Doherty, 2011: 253). Kossek, Lewis and Hammer (2010) define work-life initiatives as both, structural mechanisms (reduced workloads, flexible leave arrangements, childcare assistance) and

cultural mechanisms (supportive organizational environment, support from management) aimed at improving the employees' lives.

This study focuses on WLB among academic employees' in private Universities in Ogun State, Nigeria to discover what the academic employees' think about WLB and their ability to achieve it. Findings provide an employee perspective on the existence, nature and scope of WLB practices in the Nigerian Private Universities. It is hoped that this study would provide a good starting point for serious discussion among academics, political influential leaders and employers of labor in Nigeria about improved WLB in labor-management relationships.

Specifically, the study proposes the following research questions: (a) What types of WLB policies and practices exist within the Universities and (b) What are the factors which influence the employee's perception of work-life balance within the framework of employment relationship in the various Universities in Nigeria.

To achieve the above objectives, this study is organised as follows. The second section presents the conceptual background of WLB. This is followed by an examination of the nature and features of the Nigerian labor market, research methods and presentation of main findings and discussion of the study. The final section considers the conclusions, implications and area for future research.

Literature Review
According to Guest (2002), boundary between work and outside work remains undefined and can be viewed as blurred. That is, both domains have permeable boundaries; therefore would at some point spill over on each other. This study utilizes the spill over theory. The spill over theory posits that work and non-work domains affect one another through a permeable boundary in either a positive or a negative way. This implies that spillover between family and work occurs when feelings, attitudes and behaviors in one domain (e.g., work) are affected by role participation in another domain (e.g. family). For example, happiness at work, leads to happiness at home and vice-versa. The main message of spillover model is that values, behaviors and skills learned in one domain might have effect or influence on the other domain (Edward and Rothbard, 2000). The next section covers the data and methods used to collect the empirical evidence.

Methodology and Context for the Research

The in-depth qualitative study using purposive sampling is investigative. This approach has also been taken as a result of the shortage of research studies which have been done to understand the concept, expressions and perception of current WLB policies and practices in the African work environment.

The total sample used in this study was 129 respondents from three private Universities in Ogun State, Nigeria. Pseudonyms have been used to represent the various Universities covered by the study. The distribution of respondents is as follows: 47 University A, 51 University B and 31 University C. The semi-structured interviews were conducted between December 2014 and March 2015. The semi-structured interview were conducted in English and lasted between 20 and 30 minutes. The principal researcher commenced the interviews by explaining to the participants the aims and objectives of the research. The interviewees were assured of confidentiality and anonymity. The sampling technique adopted was purposive because the researchers chose the Universities to carry out the research.

The interview questions were semi-structured and data were analyzed using thematic content analysis. The interviews were semi-structured because as the study progressed, each of the researchers was allowed to change the questions (i.e. the questions were flexible) to probe further to get more details from the participants. Participants were solicited through a combination of email, existing personal contacts, referrals and a snowballing process. Bias was minimized by interviewing participants from various banks, both from the headquarters and branches. The participants had varied demographic profiles which are specified in Table no. 1. All the respondents were screened on the eligibility criteria that they were academic employees' of a private University in Ogun State.

Data were simultaneously analyzed and the analysis started at the outset of data collection and continued throughout the study. The data analysis involved the use of predetermined codes which were verified by a second coder to ensure reliability. The codes where generated from the themes which emerged during the analysis stage. The coding was done to look for evidence which covered three major sections: (a) What types of WLB policies and practices exist within the Universities and (b) What are the factors which influence employee's

perception of work-life balance within the framework of Employment relationship in the various Universities in Nigeria.

The next section provides the findings of the empirical evidence.

Table no. 1. Demography of Participants

Characteristic		University A	University B	University C
Gender:	Male	30	33	19
	Female	17	18	12
Age:	< 30	3	6	2
	31-40	20	22	15
	41-50	15	18	11
	>51	9	5	3
Marital Status:	Single	9	15	6
	Married	36	36	25
	Divorced	2	0	0
Highest Qualification:	Prof.	3	2	2
	Ass Prof.	4	4	1
	SL.	7	9	4
	L.	22	25	14
	AL.	11	11	10

Source: Field Survey, 2015

Findings

Work-life balance polices in the various Institutions

The findings from the study revealed a variety of initiatives which exist in the three Universities; some of the initiatives which were common to all three Universities include maternity leave, sick leave and annual leave. Some other leave arrangements which exist within the Universities are included in some of the responses:

"The leaves I know include the normal annual leave, then sick leave then study leave… which other one o?... there is another leave granted as a result of the death of a love one, that is condolence or compassionate leave that is all I know" (University A)

"There is annual leave we also have sick leave which is a twelve days leave, then there is maternity leave, there is also paternity leave, when the wife gives birth ... the man is given seven days" (University B)

The next section identifies the various initiatives in the three Universities.

The initiatives founded in Private Universities are: full time, flexitime, maternity leave, child care arrangement, career break, sabbatical leave and casual leave. Initiatives such as part time, job share, compressed hours, annualized hours, terms time, were not available in the Private Universities. Surprisingly, term time was not available in all the Universities, as long distance courses and part time course are in place when the full time students are on holidays.

Factors which influence employees' perception of work-life balance in the various Universities in Nigeria

There are several factors which influence the perception of WLB in Nigeria - these factors include psychological, social, financial, organizational and technological.

(a) Psychological factors

The emotional wellbeing of the academic employees' both at home and work was identified as one of the main psychological factors which affected workers from achieving work life balance. Some workers used words stated that:

"I would say not being able to arrive at a state of emotional rest is one of the main deterrents from achieving work-life balance. If you do not have this rest, it is difficult to even work properly and carry on with life". (University C)

"I think that one of the main factors which affect achieving work-life would be an individual mental state of health. If either your work or your other commitments are stressing you or putting pressure on you, you would not be able to achieve any form of balance". (University B)

Academic employees' in the various Universities identified that health issues and stress influenced their ability or inability to achieve work-life balance. These findings are consistent with Blyton (2008) and Ford, Heinen and Langkamer (2007), who also found that health concerns and stress issues influenced individuals utilisation of work-life balance initiatives.

(b) Social factors

Relationship with their colleagues

Many of the workers were of the opinion that their relationship with their colleagues was a significant factor which influenced their choices to utilize work-life balance initiatives.

"If your fellow staff doesn't agree to help you take your lecture you can't take any of these work-life balance programmes. Their support is very crucial because without it is nothing for you. You can't go anywhere" (University B)

"If the other colleagues are against a programme they would ensure it does not work. Some of my colleagues are especially the more senior members believe that some of these programmes especially paternity leave is for lazy or unserious people, so they would not let you take the time off "(University A)

It is important that academic employees' received the support from co-workers in the implementation of WLB initiatives, which are positive or negative (Hammer, Kossek, Anger, Bodner, Zimmerman, 2010; Kossek, Lewis and Hammer, 2010).

Marital status

The research revealed that most married professionals found it challenging to balance their work and family life. Some of them complained of spending so much time at work and struggled to care for their children and elderly relatives.

"I am married with two children. I am lucky that my boss allows me go on school runs (drop off and pick my children at closing time). My husband's office does not have such allowance. I don't know how I could have managed" (University C)

The single workers as well as the married academics acknowledged achieving WLB was a bit of a struggle. While most of the married academics identified spending quality time with their spouses and children was difficult, the single academics on the other hand, identified difficulty keeping a relationship because they spend all their time at work. Some of the single respondents noted that they found it more comfortable to be in a relationship with their colleagues because they were more accepting of their work schedule.

(c) Technological factors

Majority of the academic employees' indicated that they were still required to response to either their mobile phones or emails after office hours or during their day offs.

"My boss does not understand the meaning of personal phone as he expects me to answer all my phone calls or text messages even when am not on shift. He gets so upset if I don't; it is unbelievable". (University B)

"Most of the academic employees were of the opinion that technology either in form of mobile phones or email had negative effects on their overall work-life balance. It's really difficult to completely dissociate yourself from work if you still have to receive call or reply emails at the close of work and more annoying on holidays". (University A)

Technology is a double-edged sword as it has positive and negative effect. Its benefits include the fact that business can be done twenty-four hours of the day and seven days in a week, which also results in flexible shifts. However, these opening hours cause work-life imbalances as the traditional working hours "8am to 5pm"are gradually fading away. Managers should therefore be mindful of the use of technology outside the academic employees' work times.

Discussion

This study has provided insights into academic employees' perception of work-life balance policies and practices in Private Universities in Ogun State. Evidence from the study revealed that work-life balance issues are of major concern to faculties in the Universities. Firstly, the academic employees' reveals the availability of work-life balance practices in the Universities. The absence of flexible work arrangements is a source of concern. Working arrangements that give academic employees' flexibility in organizing their work are keys to attainment of WLB. They are usually very effective at ensuring that academic employees' can harmonize work and personal activities. Sweden has a highly developed and flexible parental leave scheme, which has been extended, so parents can have more time to care for their children. In addition, there are measures to reduce the high incidence of sick leave and proposals to provide academic employees' with more annual leave and more flexible use of leave (Shockley and Singla, 2011). In Nigeria there are several WLB initiatives such as

compassionate and ceremonial leave and, in very limited cases, crèche facilities.

There is a need to inform academic employees' on issues regarding WLB; so, let them know their rights and the options offered in various institution. University management need to understand that having a healthy and less stressed workforce would contribute to improved mental and physical health, job satisfaction and ultimately, job performance (Webber et al. 2010). However, the findings of this study also confirm the importance of organizational culture, identified by Freeman (2009) as a key problem affecting the implementation of WLB practices. Organizational culture strongly influences people's attitude to WLB policies. Managers are in position to encourage or discourage academic employees' efforts to balance their work and family lives (Hudson, 2005). Colleague and co-worker support is one of the organizational factors predicted to affect positively or negatively, the use of WLB initiatives (Hammer, Kossek, Yragui, Bodner and Hansen 2009b; Kossek *et al*., 2010). Co-workers can pressurize other academic employees' against using WLB initiatives, particularly when resources are stretched.

Conclusions

This is an exploratory study into work-life balance in Universities and conclusions can only be tentative. In summary, this study investigated the various dimensions of the concept of WLB among academic employees' of Private Universities in Ogun State. It shows the widespread nature of the limited forms and scope of WLB practices in Nigeria.

Job satisfaction and work commitment are twin brothers. For future research, the authors of this study suggest it would be useful to undertake a follow-up study with a longitudinal design, to establish the impact of new WLB policies and practices on both, public and private sector organizations. It would be interesting to compare similar work life balance polices in similar sectors in developed markets, such as the United Kingdom and the United States of America. Some methodological limitations must be acknowledged. The study focuses on only private Universities in Ogun State and one geographical region within Nigeria. Moreover, the social desirability bias of respondents cannot be ruled out: participants may respond in a manner that favors their personal interest. In spite of these limitations, this exploratory

study has contributed to the scarce literature on work–life balance issues in Africa by identifying context-specific variables in Nigeria that are potentially applicable to other African countries.

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A Study on Sources of Health Financing in Nigeria: Implications for Health care Marketers and Planners

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Abstract
There have been increasing difficulties in providing qualitative health care services to the public in Nigeria. The development has called for the need to examine ways through which government and other stakeholders resolve these crises in the health sector. The objective of this paper is to examine the level of Government spending to total Health expenditures in Nigeria. This study basically employs secondary data for analysis. The secondary data are provided from the World Bank Development indicators and Internet. The data was analyzed using the Pearson Correlation Coefficient Statistical technique. The result revealed a strong positive Correlation (r = 0.634) between Government Health Spending and Total Health Spending. This indicates that Government Health Spending constitutes a significant proportion of the Total Health Expenditures in Nigeria; despite complains about inadequate health financing. In conclusion, the Nigerian Health sector would become more vibrant, if the Government and the Private sector are ready to

give the necessary commitments required to achieve the laudable objective of qualitative health for all. The study recommends for more Government Health funding towards tackling the prevalence of some chronic diseases such as HIV, Asthma, Tuberculosis, Meningitis and Paralysis, etc.

Introduction

In the last two decades, government of most countries in the Sub Saharan African region have been facing great difficulties in providing qualitative health care to the total population, most especially the underserved and vulnerable groups. This is as a result of recurrent cost problems in health in most of these countries, leading to inadequate supply of drugs, chemicals, medical equipment and other essential consumables. In some countries there are also no payment of salaries, non replacement of retired staff and retrenchment of essential personnel as a result of problem of inadequate health financing. This development has consequently made the 2015 Millenium Development Goals for Health Programme a myth and not a reality in most of these countries (Igbuzor, 2011).The world economic situation and general recession in the economies of most African countries further compounded the picture. Many of these countries have severely reduced their health budget at a time when they need more resources to build and sustain the national health systems. In 1990, healthcare cost at least 8% of world income (Murray, Govinderaj and Musgrove, 1994).

On the average, 60% of this is public spending and it must be stated that this substantial public role is pronounced in high income countries, in contrast to what happens in poorer countries where the State usually finances small share in health cost (Musgrove, 1996).

The improvement in Nigerian health care system has been very slow because primary health care services are compromised by limited resources spent on factors that suppose to maintain and improve this quality. The Federal government expenditure allocation to health have not yet resolved the recurring problems of inadequate and inappropriate staffing, scarce supplies and equipment, and deteriorated facilities that are facing the health sector. This prevalent situation therefore calls for

immediate government attention, which is necessary to bring about increase access and quality, with regard to preventive care at the Primary Health Care Level. The primary objective of this paper is to examine the level of Government Spending to total Health expenditures in Nigeria. The paper also assesses the role of Health care Marketers and Planners to effective delivery of health services in Nigeria.

Literature Review
The Health Care System
The current state of health in Nigeria is intertwined with her history of political governance. However, there are four health care settings identified by the Department of Health, Education and Welfare. These are: ambulatory, impatient short term, impatient long term and home. Within each setting, health resources are identified. Resources are those general categories of facilities in which care might be given. Kelman (1975) offers a schema that tries to show how various parts of the system are intertwined. The schema identifies essentially four parts in health care: the Primary providers, secondary provider, financing mechanism and consumers. The primary providers are those institutions that actually deliver health services to given population. The secondary providers are health care organization that train or support health care personnel in primary provider institutions e.g. professional association that certify practitioners, offer continuing education to practitioners etc.

Organizations that provide equipment and supplies necessary to the delivery of care and planning agencies are also secondary providers. Financial mechanisms pay for the service of both primary and secondary providers. The consumer, the passive recipients of the interactions of the other three, constitutes the final component. Therefore, the schema representing the major components and interactions of the health system: financing mechanisms, direct provider facilities, educational/training institution, professional associations and accrediting groups, equipment supplies and pharmaceutical houses, consumer/patients lobbying groups and government agencies. Health care expenditures are those household, government and private institution income that are spent on health services. In health sector, we have curative and preventive health care.

The distinction is useful because it further gives us insight into the different uses of investment expenditure as a concept in economic analysis of health care financing (FMH, Abuja; 1988).According to

Dunlop and Martins (1995) the level of the health expenditure is affected by the Nation's health status via several path ways. First the poorer a nations health status, the heavier the burden of disease (BOD). This is due to the prevalence of disease that affect infants, mother and children and are easy to prevent or treat at relatively low cost. Also, if a country's health status is low and it has a high burden of disease, the average labor productivity of the population will be lower and via the relationship between Gross Domestic Product and health spending, health expenditure will be concomitantly less. A country's health status may be higher or lower than it would be otherwise. This will definitely affect the level of health expenditure (Dunlop and Martins, 1995). Health status is determined by human consumption and welfare, including health care, nutrition, education, housing, water supply, environmental pollution, life style and income.

Health Care Marketers and Health Care Planners

In most Health care organizations, there are staff that play key roles and form part of the decision making body for the organizations. They are the Healthcare marketers and Health care Planners. The Healthcare marketers are appointed to position of authority where they shape the organization by making important decisions. These decisions include: recruitment and development of staff, acquisition of technology, service additions and reductions, allocation and spending of financial resources (Buchbinder and Thompson, 2010). The Health care Planners on the other hand can be described as those responsible for planning, coordinating and administering major projects through all phases of health care planning activities in Healthcare organizations.

According to Buchbinder et al. (2010); many Health Care Organizations (HCO) have both, planners and marketing staff, and there is sometimes confusion about their separate roles. They argued that the role of the planner is to take a somewhat neutral position and to coordinate the entire business plan process. This includes balancing of interests not only of the marketing groups, but also of other groups involved in the business plan (i.e. operations, personnel and finance). Health care marketing therefore involves building sustainable and profitable health care organizations, through meeting the needs and wants of patients by strategically planning and executing processes based on the analysis of products, services, pricing, location and methods of promotion. The main purpose of health planning is to

minimize the negative effects of future uncertainty and changes in both, external and internal management environment (NOUN, 2010). Thus healthcare planners make decisions that would ensure effective and efficient utilization of resources for better healthcare delivery (Pahuja, 2015).

The development in healthcare services and medical technology has brought about a dramatic change in the role play by both, the health marketers and planners in health care delivery to the people. They are now involved in decision making that would ensure the bringing of the health care needs to the people (Awa and Eze, 2013). In Nigeria, there have been very few Health care Marketers and Planners in both, Private and Public Health sector. This has consequently leaded to low performance of these key staff in some of the Health Care Organizations where they work. It is hoped that as many people are taking up these professions, their impact and roles will become more pronounced. In some Government hospitals in Nigeria, there are personnel in administrative unit, who try to perform both, marketing and the planning functions; while in most Private Healthcare Organizations this is non - existing.

In developed countries, the Healthcare marketers and planners are committed towards bringing about improvement in the level of healthcare delivery to their patients. The health care marketers try to inform and educate patients about changes that are taking place in their environments. This may be in terms of changes in regulation, technology and competition from within and outside the industry.

The healthcare planners also try to direct, control, organize resources and monitor health planning activities towards achieving the Healthcare Organizations' goal.

The Healthcare Marketers and Planners are doctors, nurses, pharmacists, administrators and other categories of health workers that have decided to take up career in Health Care Marketing and Planning Jobs. They need effective marketing strategies and management knowledge to build long term doctor – patient relationship for their Health Care Organizations.

Government Roles in Health

It is very important we consider the role of government in health matters, since large share of health expenditure is financed by public spending. Therefore consideration will be given to the instrument

of public intervention, what role government should play, what government should not do and how to spend public money on health care. Most of what will be discussed in this section will be based on the work of Musgrove (1996). According to him, there are five distinct instruments of public intervention. These include:

Information - This may be in form of persuasion without requiring any one doing something, for example when government publicize the health risk of smoking, this include health and basic hygiene education in public schools etc.

Regulation - this determines how a private activity may be undertaken, for example government regulate medical profession by setting standard for Doctors or accrediting hospitals, importation of medical equipments, drugs and supplies, insurance industry, protection of food and water quality.

Mandate - This involves government obligating someone to do something and pay for it. For example, requirement that employers provide health service or insurance for their employees contribute to social insurance funds and requiring that children entering schools should be immunized.

Finance - Government finance health care with public funds, for example, tax particular activities or good such as alcohol or tobacco for health reasons.

Provision or delivery of service - this is done by the government, by using publicly owned facilities and civil service staff. Ministry of Health in most poor countries does this, so do various governmental bodies in many countries at all income level.

The government should play the following roles: the government should regulate activities when merely improving people's information will not be enough and deliver services when it is infeasible to finance private providers equitably. Competition should be stimulated by the government in the provision of health care. This should be extended a fortiori to non-medical component of health care such as 'hotels' services of hospitals. There should be competition among suppliers for medical purchase, but it should be done in such a way that it will not add to administrative cost and competition among insurer, which may lead to risk selection. The government should put incentive for cost containment on the supply side of the market rather than on customers. However, theory has indicated that an optimal payment should use supply side measure to control cost and reimbursing providers fully

according to cost is never the best solution (Ellis and McGuire, 1990, 1993). There is also need to deal with the pervasive problems of government failure and to improve the capacity to do whatever government ends up doing.

The government needs to do better, particularly in poor countries where much private medical practice may be of low quality. The government should use regulation, mandate training and other interventions to make the private sector function better. According to Musgrove (1996) what the government should not do include: the government should not use the tax system or any system or fees at public facilities, to make the poor subsidize the health care of the rich. Government should not tie public finance to public provision. The competition between public and private providers should be based on cost and on quality and not on price to the consumer. Government should not pay for health care by fee for service, unless other mechanisms are used to control expenditures. The government should not finance whatever people demand when care is free to consumers, if the government means to provide better health at lower costs. There should be limitation on what will be paid for public. Musgrove gave the following rules on how to spend public money on health care: priority should be given to highly cost effective public goods; most especially in poor countries where these activities could absorb all what the state now spend on health.

The government should maintain a smaller essential package which will not exhaust the available public fund and leave more discretion to provider as to what to do with public money subject to overall spending controls. United Kingdom that uses direct finance system and Germany that uses mandate social insurance have followed this approach. Feldman (1994) noted that the total welfare loss to the society may be less than when such controls are absent and some resources are wasted on excess use of medical care. The government should circumscribe public funding to a small essential package and allow everything else to be financed private, subject to some combination of mandate and regulation. The poor would be covered only, for the essential package using this approach. There may be problem of controlling adverse selection or holding health expenditure steady as a share of income.

Source of Financing Health Care

The following sources of financing health care will be briefly considered: user fees/charges, prepayment schemes, revolving fund, direct government/private financing, health insurance, community self help projects, aids/grants and others.

User fee or charges. These fees are paid in different ways; often as a minimum fee for registration per episode of illness or only one per annum, as a lump sum for certain services or prescribed drugs. The latter being the basis of the Bamako Initiative concept for medical charges. According to Witter (2002) user payments are direct, out of pocket payments made by patients for use of health facilities (both public and private). User charge has been seen as one of the means of financing health care that can bring improves in health services in most Sub-Saharan African countries. Most patients are able to raise money for the hospital fee by selling their cereals, stocks or other products, loan from friends, neighbor/community or family.

There is a fear that the poor may be prevented from seeking health care if they are compelled to expend their subsistence budget for some of the care. Out of pocket payment made by households at the point of services for items as medicines, tests and hospitalization have been between 40 – 45% of total health expenditure in many countries in Sub-Saharan African (Korte et al., 1992; Korte, 1994). The remaining fund where provided by government from external sources such as donors and multilateral lending institutions. In Uganda, all the used fees at first level government health facilities were removed in 2001 (Xu et al., 2005). In Ghana the percentage of the budget collected by Ministry of Health through charges range from zero to 15%, in Kenya it was only 5% (Vogel, 1989; 1993).

Exemptions are given to certain categories of patients: children under 5, prisoner, patients from charitable homes, homes for mentally handicapped, STD patients, tuberculosis and leprosy patient. Grosh (1992) maintained that by exempting the destitute from fees not have to be expensive. Government spending on health in Sub Saharan Africa is inadequate, insufficient, inequitable and unsustainable, hence substantial parts of the medical bill are through out of pocket payments (Ekwochi, et al., 2014; Hoare, 1987). The following are some of the argument against the introduction to user charges: the revenue collected through user charges is negligible (World Bank, 1991), large proportion of the population is poor and cannot pay, it reduces utilization rate,

other public service have introduced fee as well, for example education, water supply, agricultural extension services, lack of management capacities for the proper administration and spending of the fee collected and misuse of direct accessible cash.

The following important arguments are raised in favor of user charges. Fees make the patient conscious of the service they ask for. It contributes to financing even though small, it keeps the service running, it serves as the starting point of revitalizing basic health service, it is a demonstration of self help of the health staff and the community and it stimulates central government and donors to contribute and fulfill their obligation.

Prepayment Schemes: This form of financing is being tested by more and more countries in recent time. The payment scheme was introduced in Zaire in 1986 as a result of difficulties in paying for hospital care as well as the increasing financial gap for the hospital management that showed a need for change (Moens, et al., 1992).

The prepayment scheme is in the form of a small co-payment in cash followed with premium per household member collected once or twice annually, by Health Centre Staff and Village Committee. The scheme is different from insurance option because the premium from prepayment can be related to the revenue from selling crops and is based on the existence of the notion of risk sharing in the community. Prepayment Schemes entitle users to certain number of visits or drugs; it is a form of user's fee which incorporates risk spreading and some degree of risk sharing (Witter, 2002).

Saving based: This is characterized by risk spreading but not risks pooling. The users do bear cost in proportion to their use of facilities, but are assisted in setting money aside to cover health cost as and when they occur. The users have medical scheme that cover some ambulatory and minor hospital costs over their life time. The schemes are used in Singapore, United States and China (Nichol, L., Prescot, N. and Kai Hong Phua, 1997). The following are some of the achievement of the plans: higher coverage, administrative efficiency, financial efficiency, doubled cost recovery and higher admission rates of members than non-members. The problems include: no solidarity between different income groups, moral hazard or unnecessary hospital admissions and inflation. The scheme offers a better alternative of financing health care at health district level. The Zaire experience offers good challenge for future health care financing in poor countries.

Lotteries and Betting: It is not recognized as a major source of health care financing in developing countries (Hoare, 1987). It also provides a ready source of money to government in financing health care.

Revolving fund. These methods started in the late 1980's to tackle the shortage of essential drugs at health facilities in developing countries (Witter, 2002). The revolving fund allows certain amount to be committed or allocated for drug supplies or procurement. The National Policy on health state that users shall pay for curative services while preventive services shall be subsidized. Teaching and Special hospitals in Nigeria are therefore, encouraged to make essential drug fully available by supplementing routine budget allocations with the establishment of drug revolving fund or other cost recovery mechanism. The drug fees should be affordable by the majority of patients. Essential drugs are those that satisfy the health care needs of the majority of the population.

In low income countries, there is adequate supply of drugs and supplies in lower level facilities. Foreign exchange constraints severely limit purchase of drugs by central ministries and poor distribution systems further restrict the regular availability of drugs at lower facilities in outlying areas (World Bank, 1993). There is a correlation between drug availability and use of services. This is supported by a World Bank study of health facility demand in Nigeria, which found that there was increased use of facility with the percentage of time during the year when drug were available (Akin; Denton; Guilkey; Vogel and Wothers, 1991).

Direct government/private financing. This is done by both private and public sector employers. The public sector employers in most cases use government hospitals or provide their own clinics for their staff, while most private employers enter into either full time or part-time retainership with private hospitals or have their own hospitals. In Nigeria, only very few private employers are not making this provision for their staff and effort is on by the Federal Government to mandate all employers to provide health care services for their workers in term of Social Insurance or Health Insurance. The government is setting the pace by its National health Insurance Scheme Public Enlightenment Campaign currently on air both in the Radio and Television Stations across Nigeria. In most private companies, the workers through their collective bargaining make their employers

provide them health care services; this is in addition to other welfare benefits given to them. The intent of most employers especially the Private, in providing health care services to their staff is to increase their productivity.

Community Self Help Projects: in this type of financing, the community enters into either voluntary or compulsory contribution to provide for their health facilities. They sell their stocks, land, live stock and other products and use the proceeds as their contributions. It can also take the form of labor or fund raising. The community, organizations or Non Governmental Organizations may use funds from an income generating scheme to support health facilities at the grassroots level. The villagers may assist in the building of clinic (Witter, 2002). Most communities in Nigeria through self help projects have constructed bridges, hospitals, dispensaries, schools, police stations and so on. For example, in Kwara State, Oro community is noted for their self help projects.

The community built their General Hospital, Police Station, Schools etc, before handing it over to government for approval. This is not peculiar to Nigeria alone, it is also happening in other Sub-Saharan countries, most especially in the rural communities.

Informal payment. They are payments by patient to health staff or support staff in health facilities which are not officially recognized or authorized. This takes many different forms such as payment advance for a service, gifts after a procedure has been carried out or bringing drugs, supplies or food in to the clinic (Witter, 2002). This also forms a significant element in transitional and developing countries. Kornal and Eggleston (2001) found in Poland that 38% came from official sources and 62% from "gratuities". Bangladesh, Uganda and Kyrgyzstan are examples of some countries where public health system are being funded through informal payment (Asiimwe, McPake, Mwesigye and P. Streefland, 1997; Ensor, Hossain and Miller, 2001; Witter, 2002). In Nigeria, this form of payment is in use mostly in private hospitals.

Health Insurance: This is one of the alternatives for financing health care (Deferranti, 1985; World Bank, 1987). It may be in form of private health insurance or social insurance. Health care financing through social health insurance or tax funded schemes has become a very important tool in achieving universal financial protection for health care in most developing countries. Community based and mandatory health insurance seems to be gaining ground in Africa (Gajate – Garrido

and Owusua, 2013). Social Insurance is the mandated insurance policy for workers, in which certain percentage of their wages are contributed to the scheme, while at the same time their employers are also mandated to contribute somewhat higher payroll tax to the scheme and in some cases the government can be the third contributor. Social insurance is often referred to as social security.

The private health insurance on the other hand is distinct from social insurance in two ways. It covers only health care alone and does not include pensions for invalidity and old age, and it is financed through premium which is based on the nature of the illness of the individual covered by the policy. Private health insurance can be either profit or non-profit, bought by either groups or individuals. In Nigeria, the Federal government has been able to enroll her employees for the scheme, while only few states have been able to follow suit.

Only large firms provide health care services for their employees at the workplace and the Federal Ministry of Health and Social Services at the initial stage had considered the problems of implementation of a National Health Insurance Scheme (NHIS) amongst which include these four main issues: who will be covered, the Capitation Scheme, cost sharing provisions and the lack of catastrophic coverage. It will be better if the Federal Government can encourage the establishment of private and community based insurance scheme in addition to national schemes such as NHIS. Most developing countries especially in Africa have tried the social insurance option: Kenya, Zimbabwe, Burundi, Uganda, Zaire Tanzania and Ethiopia. It is founded that rural areas might not be suitable for the establishment or insurance schemes in these Sub-Saharan countries because of the following reasons: high premium, too much bureaucracy, problem of identifying the beneficiaries, genuine claim, lack of relations between insurance carriers and providers of health services etc. According to World Bank (1991) while the development of institutions of this kind is entirely desirable, they affect access to health care for only a small number of people. However, health insurance may in the next millennium become a popular source of financing health care in developing countries. (Kraushaar, 1994).

Aids and Grants, are local or foreign. The local one can be in form of donations in kind or cash from local charitable organizations or philanthropic individuals or organizations like Rotary Club, Lions Club, Island Club, Community Development Association, Guinness Nigeria

PLC and others. Other major sources of charitable organizations include wealthy individuals, business enterprises and religious groups. On the other hand, the foreign aids and grants are usually from foreign donors like the World Health Organizations, World Bank, UNICEF, Multinational Companies like Mobil or Shell petroleum Development Company, Chevron, United Trading Company (UTC) and others. They help in financing health care services in these developing countries in order to bring about improvement in the delivery system and also alleviate poverty.

Other sources of health care financing include sales tax revenue, the general tax revenues and deficit financing. The sales tax revenue are obtained from the tax imposed by State and Local Government in developing countries on some commodities while general tax revenues are in form of duties on imports and exports in low income countries. The deficit financing is used to augment general tax revenue. Deficit financing involves borrowing from either local or international creditors. This loan is usually repayable from future general tax revenue; which may definitely affect funds available for future expenditures. Domestic borrowing is usually done through the insurance and sales of debt certificates or bonds with guaranteed interest rate to the public. Debt financing is normally used for capital projects like construction of hospital, maternity, health centre, bridges, bore-hole etc.

The current trend of Health Care Financing in Nigeria

Nigeria's National Policy on health emphasizes the reallocation of health resources in favor of preventive services and primary health care, as the most effective and least expensive for the under-served communities (Denton and Kail, 1995, World Bank Reports, 1996). The government is now trying to incorporate the strategy in the current budgetary allocations on health. But as a result of the present economic situation, the Federal Government expenditures on health has not shown any significant improvement over the previous years, on the average the allocation to the health sector has been about 2% of the national budget. There is emphasis by the Federal Government on the training of community Health Cadres which form the backbone of Health Care Delivery in the rural areas, since the inception of the programme in 1979. All the States of the Federation now have School of Health Technology and these institutions have produced an average of 2,000 Community health workers every year as at 1987, 15,400 Community

health Workers have been trained and posted to the rural health centers. There is revision in the training programme of nurses, midwives, doctors and other health workers to incorporate relevance components of Primary Health Care however, there problem is getting most of these cadres of health workers to go and work in rural areas as a result of lack of incentives, which make life in rural area more attractive to them (World Health Organization, 1987). In 2014, $1.7 US billion was allocated to Health in Nigeria of which 82% was recurrent expenditure. This is about 6% of the total budget and second to defense, education and finance, less than in 2013 (Nigeria's Health Watch, 2013).

The quality of Nigeria Public Health Sector has become so poor now that only very few choose to use it while majority seek health care from private clinics/hospitals, traditional healers, chemists, religions homes and others in their preference for affordability or low cost, perceived quality, proximity and promptness of service (Centre for Health Policy and Strategies Studies, 1999; Denton and Kail, 1995). The health Research Reports concluded that low cost of care in government hospitals and clinics would make them prime sources for health care to majority of citizens if concerns about low quality of care are not addressed; private clinics and hospitals would gain significance as sources of care.

Methodology

This study basically employs secondary data for analysis. The secondary data are extract from Nigeria Bureau of Statistics, World Bank Development indicators; publications from Federal Ministry of Health and other relevant information from the Internets. The secondary data obtained from published or original data available in an archive, have been used effectively in past studies (Gibbon, 1971; Church, 2001). This form of data is primarily used in fields where there is a large amount of data and the cost of collection is particularly high, such as we have in this study (Church, 2001). The data obtained from some of the secondary sources used in the study are also reliable, objective and valid. The World Development Indicators dataset obtained from the World Bank are compiled from officially recognized International sources, which is the most current and accurate global development data available in all continents of the world. The data on Nigerian Health Expenditure was analyzed using Pearson Correlation Coefficient Statistical techniques. The Statistical Package for Social Sciences

(SPSS), Version 20 software was employed to perform the analysis. The hypothesis raised for the study is:

H_1: Government health spending does not constitutes a significant proportion of the Total Health Expenditures in Nigeria

Results and Discussion

Table no. 1 provides information on Nigeria Public Health Expenditures from 2009 to 2013.

Table no. 1: Nigeria Public Health Expenditures (2009 – 2013)

Public Health Expenditure	% of Gov Exp	% of Total Health Exp
2009	15.56605213	31.27630253
2010	11.59623127	26.06346626
2011	17.96992994	31.10804656
2012	17.96992994	33.1591495
2013	17.96992994	27.58376418

Source: World Development Indicators, 2015

The Government Health Spending represents the Independent variable, while the Total Health Expenditures for each year represents the dependent variable. The variables were analyzed using Pearson Correlation Coefficient and the result revealed a strong positive Correlation (r = 0.634) as shown in Table no. 2.

Table no. 2. Correlation between GHE and THE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.634[a]	.402	.203	2.48498	.402	2.019

Note: GHE are the Government Health Expenditures and THE Total Health Expenditures
Source: Computer Printout, 2015.

This indicates that Government Health Spending constitutes a significant proportion of the Total Health Expenditures and therefore, we reject the null hypothesis which stipulated that it does not constitute

a significant proportion of the total health expenditures. This result shows that despite the fact that the Government health spending is inadequate, it still constitutes a greater proportion of the Total Health Expenditures.

This is not the case only in Nigeria, but in other developing countries in the Sub Saharan African region where the poverty level is very high and the Government needs to subsidies these essential services for it to get round to all. According to Africa Health Workforce Observatory (2008), health is on concurrent list in Nigeria, this means each level of Government budgets for its own responsibility of health care service delivery. The Federal Government is responsible for tertiary care services; the State Governments handles secondary health care services and the Local Governments handle primary health care services delivery. The financing agents for Healthcare include the Federal and its parastatals, State and Local Governments and Insurance companies.

Funding also come from companies, households and partners. The National Health Insurance is gradually growing, but covers only the formal sector, both public and private.

The Insurance coverage has not been expanded to the poor, unemployed and the rural dwellers (Africa Health Workforce Observatory, 2008). It is hope that if the Government can increase its funding to Health and the resources judiciously used, that will bring about improvement in health care delivery in Nigeria

Policy Options and Conclusions
In considering the foregoing analysis, it will be observed that despite the recent increase in the Federal expenditure allocations, there is no feasible solution to the problems militating against efficient delivery of health care services in Nigeria. In order to put right this situation the following policy options are recommended:

A Federal Government in conjunction with the Federal Ministry of Health and Social Services to focus more on expenditure priorities within the health sector and the best way to utilize the available resources. They should also increase funding towards tackling the prevalence of some chronic diseases such as HIV, Asthma, Tuberculosis, Meningitis, Paralysis etc.

There should be adequate supply of safe drugs to Government hospitals by injecting more funds towards drug procurement. Effort

should be made to put in place an efficient system that will ensure an adequate supply of safe drugs to both, Government and Public Health facilities. It is also necessary to create understanding and acceptance among patients and health professionals about the introduction of drug fees, most especially in Government hospitals, where there were no fee payments or services highly subsidized. Most health facilities are in poor physical condition, there is need to refurbish existing buildings rather than build new ones in order to conserve resources. The Primary health care should be given priority because it provides the greatest access to the population. There should also be emphasis on increasing health facilities, access to safe water, sanitation and regular electricity.

The Government needs to increase private sector participation in health care delivery and encourage alternative payment systems, such as health insurance schemes.

The government should employ more efforts to inform and educate people about the benefit of National health Insurance scheme most especially, in the "un served" private sector. The other major stakeholders in Privates health sector such as traditional herbalists, religious homes and chemists should be integrated into the formal health system because of their growing influence in the Nigerian health sector.

Government and Private Hospitals should create functional Marketing and Health Planning Departments to enable those who are willing to take up careers in these emerging and lucrative fields.

Finally, if the existing constraints to the efficient delivery of health care already mentioned are overcome and the Federal Government exploits the various sources of finance to increase the allocation of health budget, there would be better and efficient delivery of health care services to the people, including the under-served. Also, the Nigerian health sector is likely to become promising and vibrant, if the Government and the Private sector give the necessary commitment that is required to achieve the laudable objective of qualitative health for all.

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Cultural Influences and Work Motivation – A literature review

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Abstract
Employee motivation must be central to the interests of managers wishing to cultivate and develop the available human resources in addition to obtain increased performances. Traditionally, motivation was regarded as an individual phenomenon pertaining to only one business culture. This paper aims to analyze, through a contrastive approach, the role played by culture in both, the theoretical and the applied research conducted on work motivation.
Keywords: culture, work, motivation, management, human resources

Introduction

How does the energy that animates the members of an organization develop? Which are the factors that afford direction and channel employee efforts towards attaining the objectives desired by their organization? The answer to these questions can be advanced through researching work motivation.

Many of the theories pertaining to work motivation have been developed in the USA. Collectively these (i.e. the theories) have been engaged in trying to explain why employees develop a certain behavior

and what kind of actions can be developed by managers in order to encourage certain behaviors and to dissuade others. Work related motivation is studied on an individual level and in the context of a sole culture. Globalization has allowed important modification in the work environment, expat managers employed with multinational companies working in branches that belong to vastly different cultures, some only minimally explored. Workforce transition from a culture to another surpasses the individual level, requiring local workers to adapt to an ever increasing number of new managers and colleagues that contribute with novel ways of problem solving. This paper aims to analyze the universality of motivational theories and to advance an answer to the question whether work related motivation is dependent on cultural traits.

Work motivation is probably one of the few areas in psychology based on the positive approach of humanizing the workplace and identifying modalities to help employees achieve their self-worth and well-being needs. Some motivational theories seek to identify sources of enjoyment when individuals endeavor to maintain their equilibrium, avoiding pain and overstimulation, while other theories focus on the joy experienced by individuals who exceed homeostatic boundaries and push their limits (Erez, Kleinbeck, Thierry, 2001).

Robbins and Judge (2014: 97) define motivation as "the process that takes into account an individual's intensity, direction and persistence of effort involved in attaining an objective". We can distinguish the presence of three key elements in this definition: intensity, direction and persistence of effort. According to Cole (1995:191) "motivation is the term used to describe the instinctual and rational processes through which individuals seek to satisfy their basic desires, their personal needs and wants, which ignite the human behavior". Thoroughly researching the individual`s motivation, Johns (1998:150-151) acknowledges four heavily interconnected characteristics that define a motivated behavior:

- *the effort* that is exerted in a different manner by individuals according to their position in the workplace;

- the *perseverance*, respectively the consistence and insistence involved in the individual`s effort to accomplish workplace related tasks

- the *direction* which represents the qualitative aspect of the motivated effort (motivation implies not only hard work but intelligent work as well)

- the *objectives* representing the aims towards which the motivated behavior is targeted. It is important to note that employees can be motivated by aims which coincide with the company`s objectives (such as an increased productivity or augmenting the number of the creative decisions taken) as well as by aims which are contrary the company`s objectives (blackmailing, fraud, truancy).

Let us analyze the relationship between culture and personal motives. Field related literature shows that reasons such as auto-efficiency, the need for self fulfillment and the inner need for competency are universal in character, although there are specific factors that determine these motives, which vary from culture to culture (Gelfand et. al., 2007: 482). Earley et al. (1999) have indicated that personal feed-back influenced the beliefs related to auto-efficiency in individualist cultures, while group feed-back determined auto-efficiency in collectivist cultures. Yamaguchi et al. (2005) have discovered that while the need for control seemed to have a universal character, personal control is critical in individualist cultures and collective control is more important in collectivist cultures. The significance of the need for self-fulfillment is different from culture to culture, the motivation afforded by this (i.e. self-fulfillment) being more pronounced in individualist cultures as opposed to collectivist ones. Sagie, Elizur and Yamauchi (1996) have collected and compared reasons of fulfillment from managers across five countries. The results have shown that the tendency towards fulfillment was the highest with managers from the USA (an individualist culture) and registered lower scores in Hungary and Japan (collectivist cultures). The drive to obtain the desired outcomes motivates self-independent employees, while the drive to prevent undesired outcomes motivates self-dependent individuals. Cultural background influences motivational orientation towards performance and learning. Chinese culture considers the learning process as fundamental in opposition to the need for accomplishment (due to the Confucian philosophy that values the need for self-improvement). Learning and seeking performance have been both correlated and associated with the performance levels registered by students from Hong-Kong; these features being more distinct with students from the US (Lee et. al.,2003, in Gelfand et. al., 2007:483).

Material and Methods

This paper comprises elements of the *interpretative and critical streams*, as various norms and practices in the field will be discussed in an interpretative manner (a neutral point of view is adopted), as well as critical one (involvement in a particular viewpoint). The research will be fundamental and its purpose will be a theoretical generalization after noticing the insufficiency of knowledge in respect to the *culture influence on work motivation,* as well identifying certain facts, for which theorization was not suggested.

Literature review

1. The Content Theories of Work-Related Motivation and Culture

Motivational theories can be divided into two categories: content theories and process theories (Isac, 2007). Content theories emphasize *what* motivates an individual, while process theories seek to offer an answer to *how* is an individual motivated towards developing a certain behavior.

Abraham Maslow`s theory argues that individuals are motivated to satisfy their needs, which are represented as a pyramid with physiological needs at its bottom and more evolved needs such as the need for recognition and accomplishment at the top. The satisfaction of needs is a gradual process, progressively advancing on the pyramid`s steps from physiological needs towards self-accomplishment needs. The latter is an insatiable need, while needs in general are considered to be universal. Revisionist theories by Miner and Dachler (1973), Bridwell and Wahba (1976), respectively Campbell and Pritchard (1976) have concluded that there is no evidence for the five types of needs.

The question that arises then is whether Maslow`s theory is transculturally applicable?  Hofstede (1984) maintains that the order of needs in Maslow`s pyramid is a value choice particular to the author and it is based on US middleclass values from the mid-50s. Early researches conducted by Haire, Ghiselli and Porter (1966) show that the importance of needs is not the same across every culture and that the priority of needs, especially in developing countries, was similar yet *not identical* to the one proposed by the original theory. In collectivist and matriarchal cultures social needs tend to be considered more important than the need for respect.

Maslow`s pyramid reflects a reduced values for incertitude avoidance and increased masculinity values. In cultures that are defined by low values for incertitude avoidance and masculinity (for example the Nordic countries) we can expect a predominance of the need for group appartenance over the need for self-accomplishment (Adler, 2002: 175). In a culture characterized by a high level of incertitude avoidance we can expect an increased need for safety over the need for self-accomplishment. In such cultures, having a secure job is more important than being autonomous, than work related challenges and creativity issues.

Nevis (1983) has compared the suppositions of managers from individualist and collectivist cultures before proposing a general framework of analysis for the hierarchy of needs in China. In this particular culture managers value loyalty towards the nation, respect shown for one`s age, wisdom and traditional norms. Therefore, at the bottom of the needs pyramid we are to expect the need for group belonging, followed by physiological and safety ones. At the top of the pyramid we are to find the need for self-accomplishment for the benefit of the society.

A second question we have to address is whether the fulfilling of inferior and superior needs produces the same effects in different cultures? Huang and Van der Vliert (2003) have concluded that in the 49 national cultures they have researched, satisfying superior needs does not produce similar effects. In developed countries with a solid social security system and a low power distance, job features that would satisfy superior needs (challenge, autonomy) are associated with a higher level of work satisfaction. In cultural contexts dominated by a high power distance, employee empowerment aimed at satisfying superior needs, sprung from close mentoring, failed to lead towards an increase in work related productivity and satisfaction (Aycan et. al., 2014).

Another work motivation content theory is forwarded by David McClelland (1961) who suggests that there are three important motives that lead individuals: the need for accomplishment, power and affiliation. Initially, McClelland considered that the need for accomplishment is fundamental in explaining why certain societies produce more than others (Sagie, Elizur and Yamauchi, 1996). During his studies conducted in India he discovered that entrepreneurs trained in cultivating their need for accomplishment have obtained better

performances compared to those lacking such a skill. In a different study (McClelland and Burnham, 1976) the authors have centered their attention on the executive managers` need for power. An early paper by Hines (1973a) has established that managers from New Zeeland follow the same typology of needs (affiliation, power, accomplishment) as the ones from the USA.

Masculinity is characterized by the ideal of success, by striving to become the best, while femininity is characterized by the empathy shown towards the less lucky and the desire to remedy their status. Due to the diversity of cultures at a global level relating to the masculinity - femininity model, it becomes hard to settle on the fact that the need for accomplishment is the main motivation in every culture. Additionally, the term "accomplishment" itself has different meanings in each culture.

The theory proposed by Frederick Herzberg argues that the factors that are related to the job description itself (intrinsic factors) have a motivational character and lead towards work related satisfaction while a second group of factors related to the job`s context (extrinsic or hygiene factors) have no bearing on work satisfaction and do not motivate towards attaining performance. Further studies have questioned the two categories of factors proposed by Herzberg (Adler, 2002:178). Ulterior researches have concluded that sometimes people continue with a certain action plan because they have publicly committed to it and not because of the rewarding action itself. In other situations, individuals who used to obtain intrinsic satisfaction from a certain activity change their motivational orientation towards extrinsic sources after they have received an extrinsic reward.

From a transcultural perspective, what is considered as a hygiene factor in a certain culture can be seen as a motivational one in another and vice versa (Aycan et.al. 2014). In a hierarchical type of culture where decisions have a centralized character, the information disseminated by the manager to his subordinates can be perceived as a sign of respect and/or trust and is construed as having a motivational character. In an egalitarian culture, information dissemination towards subordinates has no ascribed motivational character, being considered as a normal and necessary practice. When researchers have tested the theory of the two factors in countries other than the US, they have failed to confirm the initial discoveries (Hines, 1973b). In New Zeeland, surveillance and interpersonal relations have significantly contributed to attaining satisfaction and have had no impact on reducing

dissatisfaction. Moneta (2004) has discovered that Chinese workers reported the highest level of intrinsic satisfaction when required to display a high level of abilities and a low level of challenges, the cause being the influence of Daoism and the accent it places on prudence and emotional moderation. The relative importance of intrinsic and extrinsic factors in determining motivation is different from one culture to another. Furnham et. al. (1994) has identified transcultural variations in the 42 countries investigated between factors determining intrinsic and extrinsic motivation. Participants from the Americas (Argentina, Chile, US, Mexico) conferred a high level of importance to knowledge, hard work and savings, while participants from Asia and the East (Israel, China, India, Bangladesh) valued competiveness and money.

In a less scientific study conducted in the US (HR Focus, 2003), employees and Human Resources professionals have charted the five most important components of a job. Job security was considered to be the most important feature by employees while ranked only as fourth by HR specialists. For employees, job security was followed by benefits, the communication between manager and employee, employee flexibility in managing work and personal life and salary. HR professionals considered the communication between employees and management as being the most important, followed by management recognition, the relationship with the direct hierarchic superior, job security and salary.

Lawrence (1991) has discovered that Dutch managers placed more emphasis on work environment, friendly staff, freedom and work related challenges. French managers are more reliant on formal authority, British ones on extrinsic rewards. Danish managers value team work and social integration while Swedish companies have a tendency of offering a relatively lower salary because Swedish workers are motivated intrinsically and tolerate this policy better. In Norway, motivation is considered as a key managerial task, emphasizing development and personal skills (Silverthorne, 2005: 110-111).

2. Process Theories of Workplace Motivation and Cultural Influences.

Process theories concentrate on cognitive processes that occur in the minds of employees and that influence their behavior (Schermerhorn, Hunt, Osborn and Uhl-Bien, 2010:110). Expectancy theories consider that people are motivated by believing that their action

will lead to certain results. According to this theory, the likelihood that a certain action leads to results (E) multiplied by the appeal of the result (V) determines employee motivation (M). Expectancy theories rely on how much people believe that they are in control of the results spurred by their actions and on the managers` ability to allocate proper rewards, both factors varying according to cultural settings (Adler, 2002: 179).

In countries dominated by individualism, employees approach their relationship with the organization they work for in a rational manner, while those from collectivist cultures on a moral basis. Employees with collectivist values prefer organizational commitment due to interpersonal relations with their colleagues and superiors and less because the nature of the job or the reward scheme in use (Boyacigiller and Adler, 1991). If Brazilian employees expect their company to take care of their personal needs, Americans do not develop such expectancies, being less loyal to their company.

Geiger et. al (1998) have tested the expectancy theory across ten cultures (Canada, Australia, Hong Kong, Indonesia, India, Malaysia, Mexico, Oman, Singapore, SUA). They have discovered that individualism as well as long term perspectives have been associated positively with beliefs relating to expectancies, while uncertainty avoidance and power gap have been negatively associated with expectancies. Emery and Oertel (2006) have identified a strong correlation between the belief of German employees that they can achieve performance if effort is invested and they work in collaboration with their hierarchical superiors.

Objective assignation theory has been also used from a transcultural perspective. It states that employees are motivated if they are assigned with clear objectives that are specific, acceptable and challenging. Individuals who have a strong desire for accomplishment will probably be motivated by specific and challenging objectives. Individuals with developed affiliation needs will be less motivated by challenging and clear objectives because these are able to increase workplace completion, as well as the likelihood of failure (Aycan and Gelfand, 2012). Grouzet et.al. (2005) have compared the objective related preference categories of 1854 students from 15 countries and have identified 4 types of objectives, resulted from combining two dimensions: extrinsic-intrinsic and auto-transcendence - physical self. The structure of the objective related categories was the same across all the researched cultures yet the positioning of the objectives in the space

created by the two categories was different. Intrinsically oriented objectives were: self-acceptance, affiliation, sense of community and physical health, while the extrinsically oriented ones were: financial success, public image and popularity. Financial success has a less pronounced physical and extrinsic character in financially underdeveloped cultures compared to wealthy ones.

Simcha Ronen (1986) preferred to analyze cultural differences regarding work motivation by considering 14 work related objectives (as opposed to needs). He observed that employees group objectives such as work space, work time, extra income and workplace security in one cluster, while relationship to colleagues and managers generally appear in a different one; work related challenges and opportunities to use their abilities form a third cluster. Ronen and Shenkar (1985) have identified the following groups of countries according to the similarity of work related attitudes: Anglo-American, Nordic and Germanic, Latin - European, Latin -American, Middle East, Far East, Arab countries and independent countries. Furthering their research, the following additional clusters have been identified: Arabic, Anglo-Saxon, Nordic, Germanic, Latin-American, Latin-European, Eastern Europe, African, Far East, Confucianist (Ronen and Shenkar, 2013).

Conclusion

An important part of the motivational theories in use today by researchers of organizational behavior are developed in the US according to its own business culture. The emphasis put on achievement is surprising because of the American propensity towards risk taking and their orientation towards performance. These theories do not offer a universal explanation for motivation but rather offer a reflection of the American value system (Hofstede, 1980). Cultural values, beliefs and norms have a significant impact on the ways employees can be motivated (Aycan et. al., 2014). Erez (1997) observed that managers from different cultures tend to use 4 types of motivational practices:

- Different ways to allocate rewards;
- Participation in the goal-setting and decision-making process;
- Job and organizational design;
- Involvement in improving the quality of TQM type programmes.

The expansion of transnational societies and the influence of globalization have deep implications in work related motivation. Employees that come from diverse cultures have different expectations

from an organization and its managers regarding the motivational strategies used.

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Quality of Life - Evidence from Romania

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Abstract
This study investigates the quality of life in Romania and the relative position in the European Union for the key indicators measuring QOL. In addition, a key objective is to highlight the most stringent problems and propose solutions for improving and reducing the gap of quality vs. Europe developed countries. We used Eurostat data base to obtain the set of data related to Quality of life. From a statistical point of view, in order to highlight the position of Romania in EU, we are comparing the absolute value of indicators for Romania with EU average, and we measure the intensity of gap or advantage by comparing the Romanian score with the standard deviation for all the EU 28 countries.
Keywords: quality of life (QOL), living conditions, health, education, environment.

Introduction

Quality of life (QOL) includes several dimensions: physical, economic, social, health, political or cultural. In the economic literature we find many ways of calculating quality of life, and lots of international organizations/institutions are interested in analyzing and developing studies in this direction (Eurostat, United Nations, World Bank).

It has long been accepted that material wellbeing, as measured by GDP per capita, cannot alone explain the broader Quality of life in a country. One strand of the literature has tried to adjust GDP by quantifying facets that are omitted by the GDP measure various nonmarket activities and social ills, such as environmental pollution. But the approach has faced insurmountable difficulties in assigning monetary values to the various factors and intangibles that comprise a wider measure of socio-economic wellbeing (Eurostat, 2010). Also, quality of life should not be confused with standard of living concept, which is primarily based on income.

Looking at the Romanian case, measuring the quality of life is a relatively new approach. Until 1990, due to the communist regime, there were not many studies on QOL. The first study was conducted in the 70s and published years later (inspired from a study conducted by Andrews and Whitney in US, the questionnaire consisted on 250 items of both, subjective and objective quality of life questions, applied on a sample of 3000 individuals).

Professor Cătălin Zamfir published a book in 1984 by using the data collected from the questionnaire (data modeled using advanced statistical tools). Few studies followed until 1989, containing also theoretical treaties. This was the background for the extensive studies in the last 26 years. Starting with 2007, when Romania became part of European Union, a rich set of indicators is published by Eurostat. The statistic is very useful, as we can measure and interpret data cross all the European Union members.

Literature Review

Our main goals in this article are not directed on analyzing in depth the studies conducted on quality of life in Romania, but we will highlight the main ones in this section.

Immediately after the communism fall, in January 1990, the Institute for Quality of Life was created under the aegis of the Romanian Academy. (Băltăţescu, 2001).

As described by the institute for quality of life (ICCV), the major research program aims to:

- create a full image for the quality of life status, by taking into account numerous components, such as: material status, health, education, family life, housing, public services, etc;

- monitor social changes;

- explore cross-relations between various life components, in order to understand which of these combine and create a qualitative life;

- identify vulnerable groups.

All data produced by ICCV research is published in the Quality of life Diagnosis.

In 1994, another study named Public Opinion Barometer was including substantial information about the quality of life in Romania. The surveys and results publishing were conducted by The Foundation for an Open Society. All data's are published and available for free. As we can observe, the Academic and NGO environment was very much interested and involved in measuring and proposing ways of improving the quality of life. Unfortunately, as we will see in the next sections, these efforts were not accompanied by coherent policies, and Romania is ranked with one of the lowest quality of life in the European Union.

Methodology and Context for the Research

Romania had a slow and painful transition from communism to democracy. This affected severely the quality of life for most Romanians. Even if we are for 9 years members of EU, our average net income is almost 8 times lower than the European Union average. We decided to conduct this research in order to highlight the gap or advantage we have compared with the rest of EU members and to propose solutions for narrowing the gaps in the future.

The quantitative analysis is based on statistical data, which compare the Romanian results with the EU average results. In addition, we will compare the gap or advantage of all analyzed indicators with the standard deviation of the entire data set (data related to all EU countries), in order to determine if the gap/advantage is manifesting an intensity in normal limits or a strong intensity. By applying this model,

we want to identify the key areas needed to be improved and what actions could be taken in this direction.

In order to have a consistent view of the Romanian results and our relative position in the EU, we decided to use as source of data, Eurostat. The main groups of indicators are:

- Material living conditions;
- Productive or main activities;
- Health;
- Education;
- Economical and Physical Safety;
- Governance and basic rights;
- Natural and living environment.

Fig. no. 1. Quality of Life - Romanian position in the EU 28
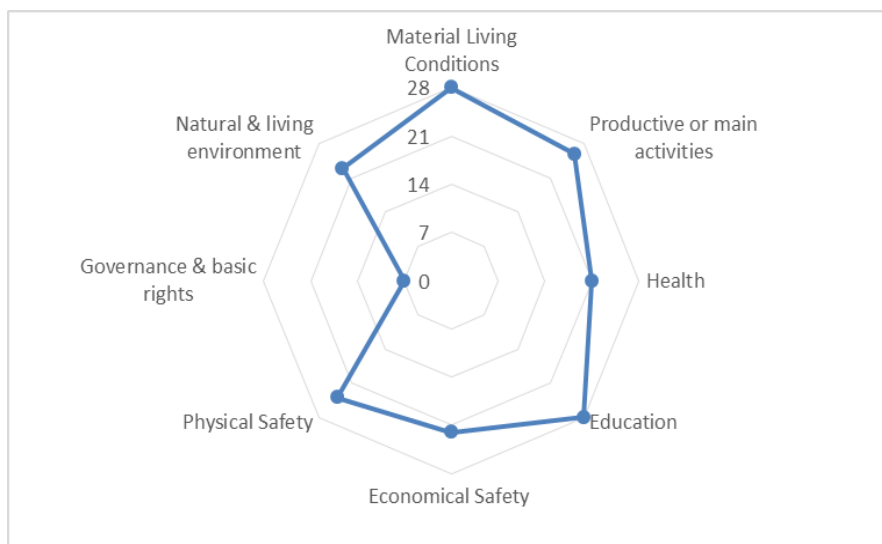
Source: Eurostat, author's own adaptation

We can notice that, with small exceptions, Romania has very low scores across the main categories, being on the last position in the European Union for two important categories: material living conditions and education.

Table no. 1. Quality of life - Romanian position in the EU 28

Category	Indicator	Rating
Material Living Conditions	At risk of poverty rate total	28
Productive or main activities	Low-wage earners a proportion of all employees	26
Health	Health life years	21
Education	Participation rate in educations & training	28
Economical Safety	Inability face unexpected financial expenses	22
Physical Safety	Death due to homicide, assault	24
Governance basic & rights	Gender pay gap	7
Natural & living environment	Pollution, gripe or other environmental problems	23

Source: Eurostat, authors' own adaptation

In the next sections, we will present the situation for each quality of life category, and also our remarks and recommendations.

Findings
A. Material living conditions

In order to evaluate the material living conditions, we analyzed a set of 4 indicators: mean equivalised net income; risk of poverty rate; severely materially deprived people; households' ability to make ends meet.

The results for Romania and the gap/advantage vs EU average are represented in the table, below:

Table no. 2. Material living conditions

	Advantage	Gap
Intensity in normal limits		- at risk of poverty rate (<65 years);
Strong intensity		- mean equivalised net income; - risk of poverty rate (<18 years); - severely materially deprived people; - households ability to make ends meet very difficult.

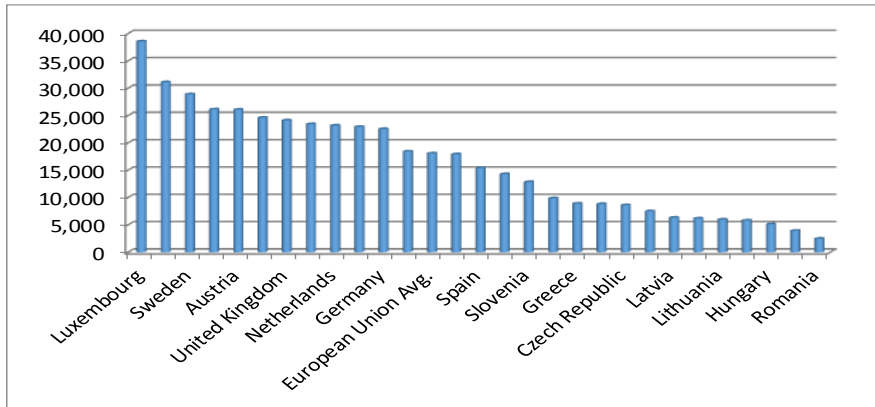**Source:** Eurostat, authors' own adaptation

A very important indicator for measuring material living conditions is the mean equivalised net income. The indicator is taking into account the impact of rences in household size and composition. The equivalised income attributed to each member of the household is calculated by dividing the total disposable income of the household by the equivalisation factor. Eurostat applies an equivalisation factor calculated according to the OECD-modified scale first proposed in 1994 - which gives a weight of 1.0 to the first person aged 14 or more, a weight of 0.5 to other persons aged 14 or more and a weight of 0.3 to persons aged 0-13. (Eurostat)

In absolute value, Romanian mean equivalized net income is 2.470 Euros, the lowest among EU members, and more than 7 lower comparing with EU average. Also the trends are worrying; we can observe in figure no. 2 that from 2007, Romania was not catching up too much comparing with the EU average.

Fig. no. 2. Mean equivalised net income - Evolution (2007 – 2014)

Source: Eurostat, http://ec.europa.eu/eurostat/data/database
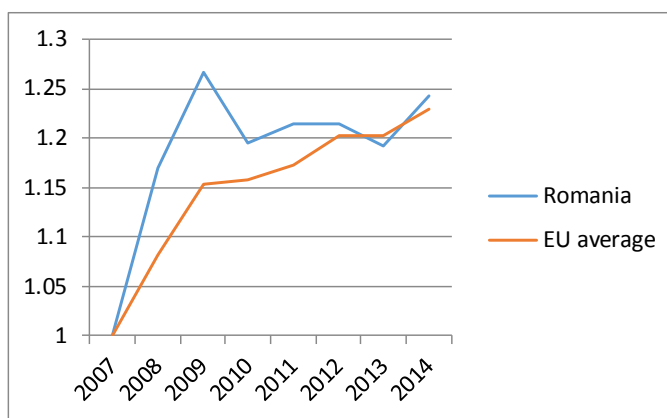
Fig. no. 3. Mean equivalised net income (2014, absolute values)

Source: Eurostat, http://ec.europa.eu/eurostat/data/database

Another important indicator is at risk of poverty rate. Romania has the biggest rate among the EU members, and the most crucial problem is among young population (under 18 years), where the rate is around 40% (almost double vs EU average).

Table no. 3. At risk of poverty rate (% of total)

	At risk of poverty rate% (Total)	At risk of poverty rate% (<18 years)	At risk of poverty rate%(>65 years)
Romania	25,4	39,4	15,5
European Union Avg.	17,2	21,1	13,8
Standard Deviation	3,9	6,7	6,7
Romania vs E.U. Avg.	8,2	18,3	1,7

Source: Eurostat, authors' own adaptation

Table no. 4. Severely materially deprived people

	Severely materially deprived people % (Total)	**Severely materially deprived people % (<18 years)**	**Severely materially deprived people % (>65 years)**
Romania	25,0	30,4	24,8
European Union Avg.	8,9	10,4	6,2
Standard Deviation	7,9	9,4	9,2
Romania vs E.U. Avg.	16,1	20,0	18,6

Source: Eurostat, authors' own adaptation

According to Eurostat methodology, severely materially deprived persons have living conditions greatly constrained by a lack of resources and cannot afford at least four of the following: to pay rent or utility bills; to keep their home adequately warm; to pay unexpected expenses; to eat meat, fish or a protein equivalent every second day; a week holiday away from home; a car; a washing machine, a TV or a telephone.

For this indicator, only Bulgaria is scoring worse. Combined with the previously presented indicators, we have the worst material living conditions in the European Union. It's also very worrying that the 2 critical type of population (children and seniors (over 65)) are severely materially deprived or they are at risk of poverty, all of this driven by a very low income

A. Productive or main activities

For this category, we took into consideration the following indicators: Unemployment rate; Low wage earners; Persons reporting an accident at work; Persons reporting a work-related health problem; Persons reporting exposure to physical health risk factors; Average hours worked per week.

Table no. 5. Productive or main activities

	Advantage	Gap
Intensity in normal limits	- unemployment rate - low wage earners (higher education) - persons reporting an accident at work - persons reporting a work–related health problem - persons reporting exposure to physical health risk factors	
Strong intensity		- low wage earners - average hours worked per week

Source: Eurostat, authors' own adaptation

Romania is very well ranked in the quality of life section "productive or main activities". In particular, the unemployment rate was in the last 10 years one of the lowest across EU countries.

Fig. no. 4. Unemployment rate in EU (Year 2015)

Source: Eurostat, http://ec.europa.eu/eurostat/data/database
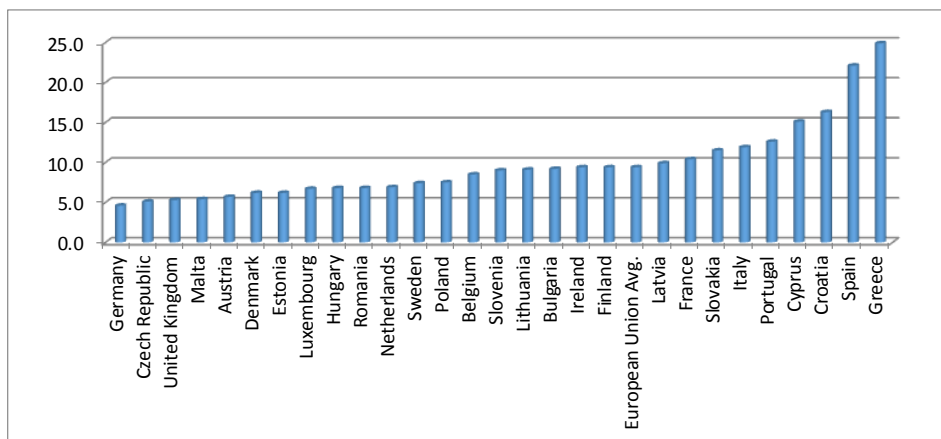
Regardless the low unemployment, the total percentage of low wage earners is one of the lowest in the EU. We can translate the correlation in a very simple fashion: even if most of the people have a work place, the compensation is not allowing then to have an increased life quality. The most affected categories are the lower education.

In this regard, we need to continue the transformation of Romania in a real developed economy, with high value added industries and well paid jobs. Off course, this is possible only with a big contribution from the government. But is not our aim to enter in public policies debates, so we will just resume our proposals in the conclusions/discussion section. A good score, better than the EU average, was recorded for the indicators related to work safety and conditions. This is increasing the quality of life for workers, but is not sufficient to ensure an increased overall quality

B. Health
The main indicators for Health category are:
- Healthy years of females and males;
- Life expectancy;
- Long-standing illness or health problem.

Table no. 6. Health

	Advantage	**Gap**
Intensity in normal limits		- Healthy years of life Females - Healthy years of life Males
Strong intensity	People having a long - standing illness health problem	- Females life expectancy - Males life expectancy

Source: Eurostat, authors' own adaptation

As we can see in Table no. 6, Romania records a gap to Europe average if we refer to healthy years of life (both genders) and a strong intensity gap for Life expectancy.

While the trend at EU level is quite constant between 2007 and 2014 for Healthy years of life, Romania is decreasing the value by 3.5 years for women's and 1.5 years for men's. This is pretty much related to material conditions and a very poor health system.

On the other side, we categorized the people having a long-standing illness or health problem as having a strong intensity advantage vs EU average.

C. Education

Education is a key factor for a healthy, developed society. The overall quality of life depends in a big extent on the level of education. As we saw in the previous categories, people with higher education have a small percentage of low wage earners and don't have a high material deprivation (Ungureanu, Burcea, 2010).

Table no. 7. Education

	Advantage	Gap
Intensity in normal limits		
		- tertiary level attainment - participation rate in education & training

Source: Eurostat, authors'own adaptation

Unfortunately, for Romania, the Tertiary level attainment is very low compared with other EU countries and with the EU average. Only 15% of the people are absolvent of tertiary education, compared with a 25% EU average. At the opposite pole, UK has an attainment percentage of around 38% from the total population.

According to Europe 2020 strategy, EU leaders have agreed a target that 40% of those aged 30-34 should have a higher education or equivalent qualification by 2020. In order to achieve this EU-level "headline" target, EU countries have set their own national attainment targets to be reached by 2020. These targets are measured by eight headline indicators, which contribute to the development of evidence based policies.

A very important indicator, capable to highlight the time invested in education and training, is derived from a statistic measuring the attainment rate for people participating in any form of education or training in the last month. (Over 25 years old). We register for this indicator the lowest score in the EU, with a level of under 2%, comparing with 10-11% in average for EU countries, and more than 30% in Denmark.

Fig. no. 5. Participation Rate in education & training
(2008-2015)

Source: Eurostat, http://ec.europa.eu/eurostat/data/database
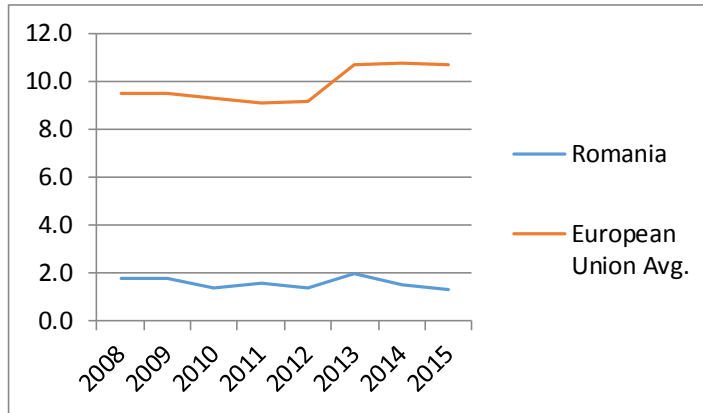
D. Economical and Physical Safety

Coming to Safety, and measured in both economical and physical form, Romania has a gap in normal limits for death due to homicide and assault, while for the inability to face unexpected financial expenses, Romania registers a strong intensity gap.

Table no. 8. Economical and Physical Safety

	Advantage	**Gap**
Intensity in normal limits		- death due to homicide, assault
Strong intensity		- inability to face expected financial expenses

Source: Eurostat, authors' own adaptation

Regarding the death due to homicide and assault, only Latvia and Estonia have a higher rate among the EU members, while for the inability to face unexpected financial expenses, more and more countries are counting an increased percentage, especially after the 2008 momentum.

Fig. no. 6. Inability to face unexpected financial expenses (%)
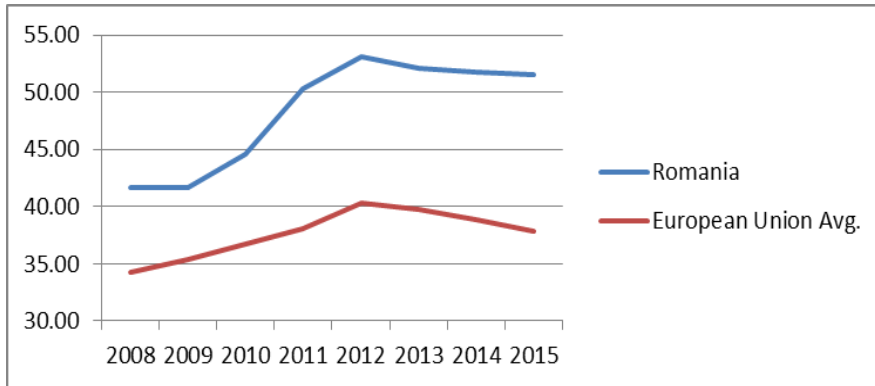
The poor results in this category are not a surprise. A poor education, corroborated with a low level of compensation and material deprived population, all is conducting to a very low economical and physical safety.

E. Governance and basic rights

The only indicator available for the area governance and basic rights, in the Eurostat statistic, is the gender pay gap, where Romania has an advantage in normal limits vs. EU average. (Table 9)

Table no. 9. Gender pay

Romania	10,1
European Union Avg.	16,1
Standard Deviation	6,0
Romania vs E.U. Avg.	- 6,0

Source: Eurostat, authors' own adaptation

We consider that the set of indicators could be improved, and we will dedicate some of our next research efforts to propose and measure the governance and basic rights statistic.

F. Natural and living environment

We selected two main indicators to measure natural and living environment:

- Pollution, grime or other environmental problems;
- Urban population exposure to air pollution.

Table 10. Natural and living environment

	Advantage	Gap
Intensity in normal limits		- pollution, grime or other environmental problems - urban population exposure to air pollution
Strong intensity		

Source: Eurostat, authors' own adaptation

Even if we are facing a small gap for both indicators vs EU average, for the second indicator, urban population exposure to air pollution, we reduced by more than 50% in the analyzed period (from 52.7% in 2006 to 25.5% in 2013). If the trend continues, we will soon be at the same level with the EU average.

Conclusions and discussion

We can make an endless debate about the current quality of life in Romania and about the gaps to be recovered in order to at least reach the EU average. At this research stage, we would like to highlight the main drivers for the poor quality of life faced by a considerable population percentage, the risks in the near future and most important, we would like to emphasis on key dependencies and propose recommendations for improving QOL in Romania.

At a first glance, a very bad indicator for QOL in Romania is the high population % at risk of poverty. This is mainly influenced by the very low income level (the lowest in EU).

Going further, the inter-dependencies between all analyzed indicators are obvious:

- A low level of people attending tertiary education is an indicator for a weak labor market - this is directly affecting the level of income and the risk of poverty;

- People at risk of poverty, with low education and materially deprived, are inevitably affecting the Physical and Economical Safety

results (death due to homicide and assaults rate is more than double vs EU average, while the inability to cover unexpected expenses has a strong intensity gap);

- A consistent approach for education and health is missing from government programs: indicators measuring life expectancy are worsening, as well as the indicators measuring the education and training programs followed by the population.

A significant role on QOL level is played by the decision/policy makers. From the government, to public institutions and public-private partnerships, they can all influence and apply coherent policies to improve the quality of life.

Our opinion is that one key area for improvement is education. By improving the education system and by stimulating people to be specialized, the work-force quality will increase and with it many other indicators will improve: net income, at risk of poverty rate, materially deprived population, inability to face unexpected financial expenses and even the rate of homicide and assaults.

In a study coordinated by World Bank, it was demonstrated that crime rates and inequality are positively correlated within countries and, particularly, between countries, and this correlation reflects causation from inequality to crime rates, even after controlling for other crime determinants (Fajnzylber, P., 2002).

A key determinant in improving the quality of life is the health system. We are currently having one of the lowest life expectancy in EU (only Bulgaria has a lower one), and this is pretty much correlated with a bad health system. But the relation is definitely bi-directional. According to Vlădescu, C. (2008), a sharp increase in poverty and corresponding decrease in living standards had a deeply negative impact on the health of the Romanian population.

Scaling Romanian quality of life into EU average is representing our first research step. We will continue to analyze the dependencies between key matrixes, by using the experience of other EU countries.

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A Study on Consumer Perspective towards Green Products in Bengaluru City, India

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Abstract
Sustainability is a trending concept of the 21st century. With an increase in global warming and carbon emissions, green marketing gained importance and subsequently encouraging green products, which can further contribute to sustainable environment. The consumer play a major role in determining the demand for any product and since green products are eco-friendly, they have created niche for those environmental consciousness customers. In this context, a study on consumer perspective and attitude towards green products will be quite useful for marketers, to understand both, consumers and market. This study focus on the consumer awareness, attitude and purchase intention towards green products.
Keywords: green marketing, green products, customer awareness, attitude, purchase intention

Introduction

The Paris climate summit has come to an end with a promise to achieve reduction in carbon emissions 'as soon as possible', whereas timeframe is not defined, and no firm commitments were made by countries. To please mother earth, the emission reduction should begin with every activity being sustainable in all aspects. The responsibility to subside carbon emissions by reducing greenhouse gasses is on every country. Green marketing is a prominent area working towards sustainability. Since 1990s it is familiar the name of sustainable marketing or ecological marketing. It employs eco-friendly practices by modifying product, changes to production process and consumption of material, employs sustainable packing and also changes advertisement. It means the marketing of products that are environmentally safe, in other words Green Products. These can be described as earth friendly or eco-friendly, bio-degradable or recyclable products.

Green products may range from food products to clothing and electronics, to automobiles and buildings; every product can be made green by changing the raw-material and processes. Several Government's and organizations have come together by labeling these products as Green, like U.S. Green Building Council, FSC for forest products, Energy Star for electronics, etc.

The customer is termed as King, and can change the direction in which the market is heading and can influence the growth of a product. The consumer can contribute to sustainability by shifting towards green products and influence producers to produce eco-friendly products, i.e. a green consumer. The consumer perspective is the point of view towards a particular stimuli, it is the consumer's attitudes, interests and preferences, intentions towards green products, while the factors influencing customer perspective include social, cultural, political, economic, technological, demographic and natural factors.

Methodology and Purpose of the study

The study covers consumer perspective (point of view) i.e. attitude and motivation towards green products. The study was performed in Bengaluru City, which is considered as an electronic and green city in India, with mostly educated people. A survey has been performed among 500 respondents using Stratified random sampling. The respondents are different: students, employees, self-employed, professionals, retired and housewife. A questionnaire was distributed

with 3-likert scale, demographic factors being independent variable and consumer awareness, attitude and purchase intention being dependent variables. The research work is being performed from 2013 and the sample collected in 2014-2015. Chi-square analysis and ANOVA tests are performed to test the hypotheses using SPSS software.

Green products are priced higher, as the production process costs more and people's knowledge towards green products depend on the education levels. So, this study considers education and income of respondents as independent variables and awareness as dependent, further awareness as independent and consumer attitude and purchase intention towards green products as dependent variables.

Literature review

Consumer behavior is mostly influenced by several internal (demographic) and external factors (product and market), an extensive literature survey has been made to study the consumer behavior with regards to green products. Banumathi Mannarswamy (2011) outlined that consumer's preferences are changing with changing the requirements of the environment. A research was performed to understand the awareness and attitude towards Green products by the consumer's in Coimbatore, and for that purpose a survey of 100 General Public (Men and Women) and 100 Students of Coimbatore city, Tamilnadu was performed and the results found the customers in Coimbatore are aware of environmental problems, but the green purchase behavior is not improved.

In another study Hossein Ataei, Farnaz Taherkhani (2015), studied the consumer behavior towards purchasing green products and investigated the consumer price sensitivity standpoint. The experimental study among Canadian consumers identified that most consumers see added value in eco-friendly products in particular to energy efficient products rather than products with social and environmental benefits. The study also found consumer behavior differs between low-end household products and expensive products like electronics and appliances. Ming-Feng (2011) stated in his dissertation report about the consumers increasing attention towards environmental deterioration and began green consumption to reduce environment pollution. The study included factors like consumers environmental knowledge, attitude, awareness and purchase intentions and observed that the environmental label information awareness has a moderating effect between the

environmental attitude and environmental purchase intention. Yogita Sharma (2011) contributed with a paper regarding the changing's in the consumer behavior towards green products. Her study observed an increasing trend in awareness of green products in consumers and green consumers are influencing most products with improvement in environmental information through eco-labeling, consumer groups and consumer guides. Companies are gaining competitive advantage by integrating green strategies into their operational and marketing activities.

Environment up-gradation is the main objective of green products. Dileep Kumar (2013) has conducted a study to understand people's desire to choose products and services that are better for the environment and the findings indicated a relation between company's green marketing campaigns, brand perception and the buying behavior of consumers. Leslie Lu, Dora Bock, Mathew Joseph (2013) in their study tried to understand the consumption pattern of green products by consumers in the millennium. The study focused on two research questions: What product attributes influence green products purchases? What are the primary reasons for non-adoption of green products? The study found that marketers are developing attention towards recyclability or re-usability, biodegradability and positive health effects stemming from eco-friendly products. A survey found that high pricing was the reason for not choosing green products by most consumers.

Consumer is the focal point for which the whole activity of marketing takes place. João Pedro Pereira Luzio, Fred Lemke (2013) made a study about customer perception of green products and detect product demands of green consumers and their consumption practices. A study was made with Portuguese green customers to understand their reasons to buy green products, required product features, pricing, environment knowledge, use and disposal. The study suggested the marketers should concentrate on the entire market rather than target a niche market based on intangible environment. Joel Jebadurai (2013) analyzed in his study the attitude of students towards green products. He observed that consumer awareness about products is increasing and their purchase attitude change with the market trends. He conducted a survey of 293 college students in Tirunelveli city to understand the attitude and awareness towards green products and found the awareness is low among them and companies should concentrate in promoting awareness among consumers about green products. Wend Marc Lim et

al. (2013) identified green products tag on products doesn't result in actual adoption, purchase and consumption of green products. The paper tried to identify the reason for failure of green products in market place namely; lack of understanding by consumers, ignorance, market opportunity, low customer delivered value, etc. The study implied that the government and organizations has a greater role in cultivating favorable perceptions and attitudes towards purchasing and consumption of eco-friendly products.

Based on the literature review, the following objectives and hypotheses were framed. The Objectives of the study are:

1. To examine the nature of green products in the consumers' perspective;
2. To understand the awareness of consumers towards green products;
3. To study the impact of income and education on consumer awareness, attitude and purchase motive towards green products.

Hypotheses of the study:

H_1: Income has impact on consumer awareness towards green products.

H_2: Education has impact on consumer awareness towards green products.

H_3: Awareness has impact on attitude of consumers towards green products.

H_4: Awareness has impact on purchase intention (action) of consumers towards green products.

Nature of Green Products

Green products can be described as having qualities that protects environment and has replaced chemical ingredients with natural ingredients (Green Retail decisions). These goods are produced with a least impact on environment in an energy-conservative manner or made from recycled components, without the use of chemicals that could harm both, consumer and environment, and supplied to market with recyclable or less packing. Some categories of green products are presented in table no. 1.

Table no. 1. Green features of products

Product	Green product	Green features
Food	Organic food	Produced using environmentally and animal friendly farming methods on organic farms
Beverages	Organic wine	Produced from grapes through organic farming without use of chemicals and pesticides
Textiles	Organic fiber	Produced from cotton, jute, silk or wool obtained from organic farm, free from genetically modified seeds, without use of harmful herbicides and pesticides
Automobiles	Hybrid vehicles, hydrogen fueled, electronic vehicles	Low carbon emissions, follow euro-vi or California's Zero Emission vehicle standards causing less pollution
Electronics	Energy efficient products- CFL, LEDs bulbs	Low power consumption and less release of gasses in electronics like television, refrigerator, etc.
Plastics	Bioplastics	Biodegradable, producing plastic bags and products with thickness above 20micron which is recyclable
Paints	Lead free paints, paints with zero volatile organic compounds (VOC)	Release low level toxins after application, chemical free
Perfumes	Eco-friendly perfumes	Without chlorofluorocarbons (CFCs) propellants, using hydrocarbons and nitrous oxide as propellants
FMCGs	Herbal soaps, cosmetics, shampoos, etc.	Without chemicals, artificial colors and compounds harming skin and complexion

The product and production process should help in upgrading environmental quality, but there is fear of "Green Washing" where by companies adopt green practices outwardly or name product just to propagate they are green to increase profit rather than real concern for environment and do very little for the environment benefit to attract the niche eco-friendly customers segment, i.e. green consumers. So, eco-labeling has become familiar with green products. Eco-label is the mark inscripted on products, which define the environmental aspects of consumer products that quantify pollution or energy consumption by way of index scores or units of measurement or reduction of harm to the environment. Product specific labels like Energy star, EU Eco label, Nordic Swan, German Blue Angel, Forest Stewardship Council (FSC), etc. and General labels include recyclable, eco-friendly, low energy, recycled content or biodegradable.

Results of the study
Consumer Awareness towards green products
Awareness of consumers creates interest towards the products. Once the consumer gain interest towards products, he will understand the pros and cons of the products and that create desire to possess the products which pushes the consumer towards action i.e. buy the product. It can be termed as Awareness – Interest – Desire – Action, AIDA principle. This study combines interest and desire as attitude, therefore AAA model Awareness – Attitude – Action. This study considers education and income demographics of consumers.

As stated earlier Bengaluru population is well educated, the sample constituted of graduates and post-graduates with 85% and the remaining 15% are mostly students in high school, a very small proportion of respondents are high school dropouts. Income is another important variable. About 45% of the respondents have an annual income of ⬜ 6lakh and above, and around 28% of them are students and are yet to start earning. Only 3% of respondents are in pay scale of ⬜ 2-4 lakh and 23% are earning ⬜ 4-6 lakh. A high proportion of 80% respondents know a lot about green products and only 10% of respondents know just somewhat about green products; almost 50% of the respondents feel that green products shouldn't be harmful to the environment, minimize waste and conserve energy, 30-40% of the respondents feel that green products should probably be made with bio-

degradable material, and less than 20% of the respondents stated don't know the required features of green products.

From the total 500 respondents, only 354 purchase green products, 146 respondents doesn't buy for various reasons like lack of trust in producer/product, too expensive or lack of awareness/knowledge and 50-60% of the respondents buy green products to save energy, to protect environment and for a better quality of life. 35% of the respondents who buy green products feel these features are moderately important and 5-10% of those buying green products feel these features are likely important.

Testing of Hypotheses

Decision Rule
Null hypotheses is accepted if p value is greater than 0.05 (p>0.05) and reject alternate hypotheses and vice-versa.

H_1: Income has relationship with consumer awareness towards green products.

This hypothesis helps to identify if there is any relationship between the income of consumers and the awareness towards green products.

H_0: There is no significant relationship between the income of consumers and the awareness towards green products.

H_1: There is a significant relationship between the income of consumers and the awareness towards green products.

Chi-square test is run in SPSS to study the relationship at a 5% Significance level.

Table no. 2. Income * aware of green products

| | | | Aware of green products | | | |
			Know a lot	Know some what	Don't know much	Total
Your income	0-200000	Count	101	17	25	143
		Expected Count	114.1	14.9	14.0	143.0
	200000-400000	Count	12	2	2	16
		Expected Count	12.8	1.7	1.6	16.0
	400000-600000	Count	91	13	14	118
		Expected Count	94.2	12.3	11.6	118.0
	600000-800000	Count	87	10	4	101
		Expected Count	80.6	10.5	9.9	101.0
	800000-1000000	Count	67	6	4	77
		Expected Count	61.4	8.0	7.5	77.0
	>1000000	Count	41	4	0	45
		Expected Count	35.9	4.7	4.4	45.0
Total		Count	399	52	49	500
		Expected Count	399.0	52.0	49.0	500.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.269(a)	10	.010
Likelihood Ratio	27.414	10	.002
Linear-by-Linear Association	20.832	1	.000
N of Valid Cases	500		

The Pearson Chi-square value (p) is 0.01 is less than 0.05, $p<0.05$, therefore we will reject null hypotheses (H_0) and accept alternate hypotheses (H_1). Thus, we can state that income have impact on the awareness of consumers towards green products.

H_2: Education has impact on consumer awareness towards green products.

Since education provides knowledge about products, we try to find the relationship between the education level of the consumers and their awareness towards green products.

H_0: There is no significant relationship between the consumer's education and awareness towards green products.

H_1: There is a significant relationship between the consumer's education and the awareness towards green products.

Chi-square test is run in SPSS to study the relationship at 5% Significance level:

Table no. 3. Education qualification * aware of green products

Your education qualification		Aware of green products			Total
		Know a lot	Know some what	Don't know much	
High school	Count	8	3	9	20
	Expected Count	16.0	2.1	2.0	20.0
Under graduate	Count	36	6	9	51
	Expected Count	40.7	5.3	5.0	51.0
Graducate	Count	175	21	24	220
	Expected Count	175.6	22.9	21.6	220.0
Post graduate	Count	180	22	7	209
	Expected Count	166.8	21.7	20.5	209.0
Total	Count	399	52	49	500
	Expected Count	399.0	52.0	49.0	500.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.859(a)	6	.000
Likelihood Ratio	35.204	6	.000
Linear-by-Linear Association	33.682	1	.000
N of Valid Cases	500		

The Pearson Chi-square value (p) is .000 is less than 0.05 i.e. p<0.05, therefore we will reject null hypotheses (H0) and accept alternate hypotheses (H1).

Thus, we can state that consumers education have an impact on the consumers awareness towards green products. As green products needs knowledge about environment, ingredients and production processes, the less educated consumers have a low awareness towards green products than the others.

H_3: Awareness of consumers has impact on the attitude of consumers towards green products.

The knowledge and understanding of consumers influences their attitude and perspective towards green products.

H_0: There is no significant relationship between awareness and attitude of consumers towards green products.

H_1: There is a significant relationship between awareness and attitude of consumers towards green products.

Anova test is run in SPSS to study the relationship at 5% Significance level:

Table no. 4. Awareness * Attitude towards green products

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Not harmful to environment	Between Groups	23.397	2	11.699	25.840	.000
	Within Groups	225.011	497	.453		
	Total	248.408	499			
Waste minimization	Between Groups	42.420	2	21.210	50.933	.000
	Within Groups	206.962	497	.416		
	Total	249.382	499			
Energy conservation	Between Groups	52.874	2	26.437	58.118	.000
	Within Groups	226.076	497	.455		
	Total	278.950	499			
Bio-degradable material	Between Groups	7.595	2	3.798	6.354	.002
	Within Groups	297.053	497	.598		
	Total	304.648	499			

Since the ANOVA value (p) is less than 0.05, p<0.05 we reject null hypotheses (H0) and accept alternate hypotheses (H1). Hence, we conclude that awareness have an impact on the consumers attitude towards green products. Those who know much about green products consider they should not be harmful to environment, minimize waste, made of bio-degradable material and help conserve energy.

H₄: *Awareness of consumers has impact on purchase intention of consumers towards green products.*

Awareness of consumers creates a positive opinion and attitude towards green products and can influence the consumer purchase intention.

H_0: There is no significant relationship between awareness and purchase intention of consumers towards green products.

H_1: There is a significant relationship between awareness and purchase intention of consumers towards green products.

ANOVA test is run in SPSS to study the relationship at 5% Significance level:

Table no. 5. Awareness * Purchase intention towards green products

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
To save energy	Between Groups	.430	2	.215	.539	.584
	Within Groups	140.045	351	.399		
	Total	140.475	353			
To protect environment	Between Groups	.223	2	.111	.306	.737
	Within Groups	127.870	351	.364		
	Total	128.093	353			
For better quality of life	Between Groups	.985	2	.493	1.038	.355
	Within Groups	166.622	351	.475		
	Total	167.607	353			

Since the ANOVA value (p) is more than 0.05, p>0.05 we accept null hypotheses (H_0) and reject alternate hypotheses (H_1). Hence, we conclude that awareness about green products have no impact on purchase intention or purchase attitude of consumers towards green products.

Discussion

The market is a combination of consumers with different knowledge and awareness. The study observed high income and education of consumers have more exposure to various products and low income consumers are traditionally using the same old products. The current study supported H_1 and H_2 stating income and education have impact on awareness of green products. The study was consistent with Rohit Nema (2011), who stated educated consumers tend to be aware of eco-friendly products and their income supports their purchase.

Awareness creates attitude towards green products and results in ultimate action towards purchasing the products, results of H_4 stated awareness has no impact on purchase action which was consistent with the study made by Banumathi Mannarswamy (2011), which identified consumers are aware of environment problems, but the green purchase behavior is not improved; the results are in contrary with the study made by Norazah Mohd Suki (2013), who stated there is a significant relation between consumer awareness and their purchase of green products.

Conclusion

Green products are environmental friendly products and help in promoting the sustainability of the environment. Any product in the market can be successful with customer participation and encouragement. Market is a mix of several products and consumers with different demographics and knowledge. The consumers' awareness should be created by the marketers by different promotional means to initiate the consumer awareness. Such awareness will create positive attitude towards goods and drive them towards purchase of goods, i.e. Awareness-Attitude-Action.

The present study made an insight into products with green features (eco-friendly) and understands consumer perspective, their opinion and attitude towards green products. The study identified the relationship between income, education and awareness of consumers towards green products and observed positive relationship between them. The study also identified a relationship between awareness, attitude and action towards green products, and observed positive relationship between awareness and attitude, but no relationship between awareness and purchase intention towards green products.

The concern for global warming has necessitated a high promotion of eco-friendly initiatives and as a result, green products

concept is an upcoming aspect in India, which is an attractive market on the global map. Undoubtedly, further studies in this regard can be made on broader aspects like acceptance levels, satisfaction and recall of green products by consumers in India.

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An Enquiry into the sluggish Growth of Workers' Remittance Determinants: A Case of Comilla

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Abstract
The study focused on the importance of per capita and marginal productivity of remittance inflows in Bangladesh. Although remittance as a percentage of gross domestic products has stood above ten percent in recent times, the majority of Bangladeshi remittance earners are unskilled. Unskilled remittance remains a constraint for the development direction of Bangladesh that seeks to make a transition from a low income country to a middle income country. Based on cross section data, a multinomial logistic regression model was fitted to identify the significant inputs of skill development for remitters. Empirical results suggest that the log of remittance, the p-value is statistically significant. The study also found that skill development training and access to credit for remitters would contribute to maximizing remittance in the long run.
Keywords: Remittances, Labor Productivity Skills, Economic Growth

Introduction

Workers' remittance has become an important source of foreign currency earnings in Bangladesh. During the past four decades, Bangladesh received significant amount of workers' remittance. This remittance has played an important role in investment. Foreign exchange reserves have significantly stabilized Bangladesh's financial sector, which is now the second leading amount of capital inflows in Bangladesh (Bangladesh Bank, 2014). Taylor (1992) and Aggarwal et al. (2006) evaluated at both, international and national levels. Their study provides an insight into the relation between growth of the national economy and workers' remittance.

This study also supports the hypothesis that the development impact of remittances enhances the presence of sound macroeconomic policies and institutions. Iqbal and Sattar (2005) found that in the absence of worker remittances, it was likely that the macroeconomic determinants exchange rate, monetary and fiscal policies will come under pressure. The impact of workers' remittances on growth and poverty reduction in developing Asia-pacific was examined by Adams (2003) and Jongwanich (2007). Kundu et al. (2012) used a multiple regression model to estimate the real GDP and workers' remittance relationship. Results from a Johanson co-integration test provide evidence that GDP is most likely to have a long run relationship to workers' remittance.

According to the World Bank (2011b), about eight million Bangladeshi workers are currently working abroad. Each migrant remits back on average US$ 1,672 per year per head. The corresponding figures for India and China are US$ 4,843 and US$ 6,112 respectively. These figures are indicative that the majority of the Bangladeshi wage earners are unskilled workers. World Bank statistics further reveal that over time the skill composition of overseas workers has become skewed towards semi-skilled and unskilled workers.

Barua et al. (2007) found that skill development can affect the growth of workers' remittance and the growth of remittance is associated with an increasing marginal productivity of remittance. Although the majority of Bangladeshi remittance workers are unskilled and semiskilled, they still dominate the overseas labour market of Bangladesh. This situation needs to change as Adams (2009) shows in his study. Increasing the total number of migrant workers and not

increasing their marginal productivity acts as a hindrance to progressive demands in the international labor market.

As new areas evolve a strategy to promote and increase labour in Technical Education and Vocational Training (TVET) become essential (ADB, 2004). Before a country pursues a labor-intensive growth strategy, it needs to take new strategies regarding marginal productivity of employment. Strategies for workers' remittance growth should be based not only on the analysis of the number of emigrant migration, but also on his/her skills. Thus, skill allied factors is an important role in giving access to employment opportunities and its measure by employment elasticity of labour, that is, percentage change in employment divided by the percentage change in the labour followed by Caillods (1994). The skill level and quality of the workforce will thus increasingly provide the cutting edge to successful competition in the global economy (ILO, 1998a).

Acceleration of economic growth and productivity of the labour market situation depends on skilled labor force. Mahmood (1992) observes that the maximum levels of gains from migration are achieved by skilled and semi skilled professional. Skilled migrants will typically earn more and may establish trade and investment links with their home country. This may contribute to economic growth directly or indirectly, but there is no official record in Bangladesh. These studies suggest that workers' remittances have positive effects on the economy of Bangladesh in terms of aggregate consumption, investment, reduction in current account deficit, external debt burden, and improve education/skills of the remittance workers'. It can be seen from workers' remittance determinants that focused on the importance of what are the essential allied factors of skill development for international migrant labour of Bangladesh.

The objective of our research includes an enquiry into the sluggish growth of remittance determinants in Bangladesh, for the purpose of a transition nation from a low income country to a middle income country. The remainder of this paper is organized as follows.

Emigrant Labor Remittance in Bangladesh
Remittance Recipients Countries
The export earnings of labor services in Bangladesh have been growing at a speedy rate from the early 1990s (BMET, 2013). Remittance as a percentage of GDP has stood well over ten percent

recently. Around eight million Bangladeshi expatriates in more than 140 countries signify the strength of Bangladesh in international migration (Bangladesh Bank, 2014). Bangladesh Bank is responsible along with other government agencies to internal and external balance in the economy. Labour surplus Bangladesh is one of the top ten labour-receiving countries in the world (World Bank, 2010). Top destination countries are India, Saudi Arabia, the United Kingdom, Kuwait, Oman, the United States, Malaysia, the United Arab Emirates, Italy, Jordan. According to World Bank (2011b), Bangladesh had the seventh position in top ten emigration countries and top ten remittance recipients in 2010 (billions, table no. 1).

Table no. 1. Top Remittance Recipients Countries in 2010 (Billions)

South Asia	Low-Income Countries	Developing Countries	World
India ($55.0 bn) **Bangladesh ($11.1 bn)** Pakistan ($9.4 bn) Sri Lanka ($3.6 bn) Nepal ($3.5 bn) Maldives ($0.0 bn)	**Bangladesh ($11.1 bn)** Nepal ($3.5 bn) Tajikistan ($2.1 bn) Kenya ($1.8 bn) Haiti ($1.5 bn) Kyrgyz Republic ($1.0 bn) Uganda ($0.8 bn) Ethiopia ($0.4 bn) Mali ($0.4 bn) Cambodia ($0.4 bn)	India ($55.0 bn) China ($51.0 bn) Mexico ($22.6 bn) Philippines ($21.3 bn) **Bangladesh ($11.1 bn)** Nigeria ($10.0 bn) Pakistan ($9.4 bn) Lebanon ($8.2 bn) Republic of Egypt ($7.7 bn) Vietnam ($7.2 bn)	India ($55.0 bn) China ($51.0 bn) Mexico ($22.6 bn) Philippines ($21.3 bn) France ($15.9 bn) Germany ($11.6 bn) **Bangladesh ($11.1 bn)** Belgium ($10.4 bn) Spain ($10.2 bn) Nigeria ($10.0 bn)

Sources: World Bank Migration and Remittances Factbook, 2011.

Bangladesh Overseas Employment and Remittances Profile

A dynamic aspect of Bangladesh overseas employment, semi/unskilled employment is emerging to take up a very important role in the remittance scenario. Bangladesh overseas employment size and total remittance in million US$ can be seen from the Bangladesh Bank (2014). Total remittance of Bangladesh grew progressively from US$ 381.18 million in 1980-81 to US$ 12843.43 in 2011-12. In terms of calculated numbers, eight million Bangladesh's are currently working abroad. This suggests an added more than 200,000 emigrants to the total

remittance workforce annually, and needed annually to maintain a stable growth of emigrant labour market.

In respect of sluggish growth of remittance, it grew tediously from about 9.78% in 1981-82, to about 10.24% in 2011-12. Similarly, remittance as a 1.99% of GDP in 1980-81 rose gradually up to 11.14% of GDP in 2011-12. While, remittance as a 56.33% of merchandise export in 1980-81 rose slightly up to 1988-89, but reduced mildly up to 2000-01, again rose slightly up to 52.03% of merchandise export in FY 2011-12 (Bangladesh Bank, 2013).

Growth of Worker's Remittance in Bangladesh

Workers' remittance inflows to Bangladesh are increasing at an average annual rate of nineteen percent in the last thirty years from 1979 to 2008 (Hussain and Naeem, 2009). The flow of workers' remittance increased steadily from US$24 million in 1976, to US$1949.2 million in 2000 and started to play a key role in the economic development of the country. However, from 2001, the trend shows a dramatic increase of four hundred percent to US$9689.3 million in 2009 and US$11.1 billion in 2010 (Bangladesh Bank, 2013). While the flow of remittances slowed down quite rapidly in the region as a result of the global financial crisis, the flow of remittances grew robustly by twenty four percent in Bangladesh during 2009.

Figure no. 1. Year wise growth of remittance
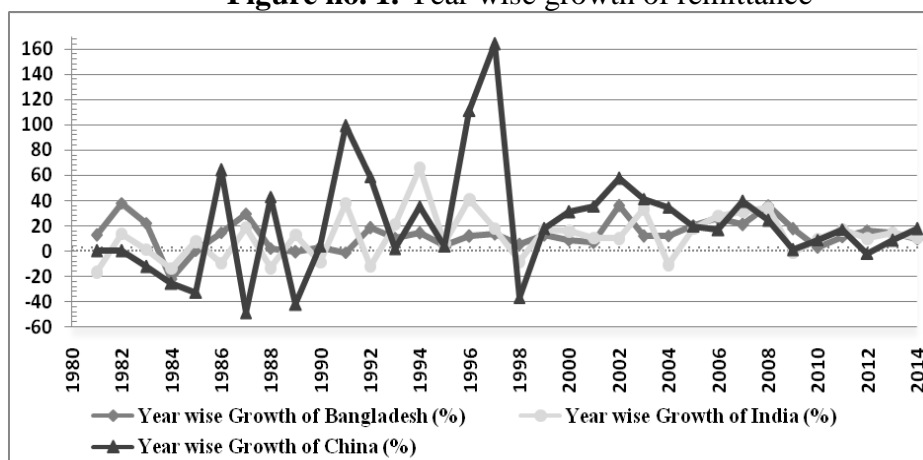
Source: World Bank 2015. *Migration and Remittances Factbook, 2015*. Washington, DC: World Bank. For latest data and analysis on migration and remittances, please visit http://www.worldbank.org/migration.

The year wise growth of remittance trends in Bangladesh, India and China are shown in figure 1.

As shown in the figure, on behalf of Bangladesh a significant sluggish growth rate (year to year) of these transfers started since 1980. The year growth of remittance in Bangladesh is maximum 38%, in India 66% and in China is 163%. The growth rate of remittance of Bangladesh is declining slowly in 1984, 1989 and 1991, but the per capita remittance rate of growth is sluggish comparable with India and China. The study focused on the quality of the semi/unskilled labor force.

Data and Methodology
Sources of Data

To analysis the primary data collected, quantitative technique is used to show the causes and effects of the factors on returns to workers' remittances of sub-urban and rural areas of Comilla District, Bangladesh. Given the sample size and distribution, it is clear that the survey is not intended to provide representative results of the whole emigrant in Bangladesh, but to provide a quick diagnostic check on skill allied factors for strong growth of remittances in Bangladesh.

The systematic sampling design that is used in the study is based on the geographical location and also determined the size of sample by using the appropriate formula. The most practical way of a 4% sample is desired, the first item would be selected randomly from the first twenty-five and thereafter every 25th item would automatically be included in the sample. Thus, in systematic sampling only the first unit is selected randomly and remaining units of the sample are selected at fixed intervals. Moreover, it is an easier and less costly method of sampling and can be conveniently used even in the case of large populations (Kothari, 1990). The primary data were collected from the respondents during the period between May and June, 2015.

The survey was conducted over two hundred respondents from the Comilla district. A structured questionnaire was prepared, that was filled up by direct interview. All filled-up questionnaires were fully scrutinized, the data thus collected were processed and analyzed to reach a conclusion, and one hundred and eighty were used as valid data in favor of research objective.

Analytical Framework
Logistic Regression Model
The advanced econometrics models such as multinomial logistic regression model are used and fit them to identify the significant factors of skill for remitters. The study used multivariate techniques to explore how to increase per-capita and marginal productivity of the remitters by allied factors, viz. multiple logistic regression models was used to identify the determinants of remittance growth. The model expresses a qualitative endogenous variable as a function of several exogenous variables, both qualitative and quantitative (Gujarati, 2004).

The reason behind the use of logistic regression model is that such model is helpful to predict the likelihood of factors options for selected variables to achieve high growth of remittances in Bangladesh.

Let Y_i denote the endogenous variable for the ith observation.

Where Y_i = log of received workers' remittance

The linear probability model (LPM) was:

$$P_i = E(Y = 1 \mid Xi) = \beta_1 + \beta_2 X_i \tag{1}$$

Where, X_i is an exogenous variables and β_i's the regression coefficients. Give a notation $P_i = E(Y = 1lXi)$ to represent the conditional mean of Y given X when logistic distribution is used. The method is to model the response using the logistic function given by:

$$P_i = E(Y = 1lXi) = \frac{1}{1 + e^{-(\beta_1 + \beta_2 X_i)}} \tag{2}$$

For ease of exposition, we write (2) as

$$P_i = \frac{1}{1 + e^{-z_i}} = \frac{e^{z_i}}{1 + e^{z_i}} \tag{3}$$

Where $Z_i = \beta_1 + \beta_2 X_i$ and Equation (3) represents what is known as the cumulative, logistic distribution function (Kramer, 1991). It is easy to verify that as Z_i ranges from $-\alpha\ to +\alpha$, P_i ranges between 0 and 1 and that P_i is nonlinearly related to Z_i (i.e.,X_i), thus satisfying the

two requirements[1]. We have created an estimation problem because P_i is nonlinear not only in X but also in the β_i's as can be seen clearly from (2). This means that we cannot use the familiar OLS procedure to estimate the parameters, which can be linearized shown as follows:

If P_i, the probability of skilled workers' remittance, is given by (3) then (1-P_i), the probability of semi-skilled or unskilled workers' remittance is:

$$1 - P_i = \frac{1}{1 + e^{z_i}} \qquad (4)$$

Therefore, we can write:

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{z}}{1 + e^{-z_i}} = e^{z} \qquad (5)$$

Now $P_i / 1 - P_i$ is simply the odd ratio in favor of high growth of remittance – the ratio of the probability of high growth of remittance to the probability of low growth of remittance. If we take the natural log of (5), we obtain a very interesting result, namely:

$$L_i = In\left(\frac{P_i}{1 - P_i}\right) = Z_i$$
$$= \beta_1 + \beta_2 X_i \qquad (6)$$

That is, L, the log of the odds ratio, is not only linear in X, but also linear in parameters. L is called the logit, and hence the name logit model. For the purposes of estimation of the logit model, we write (6) as follows:

$$L_i = In\left(\frac{P_i}{1 - P_i}\right) = \beta_1 + \beta_2 X_i + u_i \qquad (7)$$

To estimate (7), the values of the regressand, or logit, L_i. This depends on the type data we have analysis for data at the individual, or

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[1] Note that as $Z_i \to +\infty, e^{-Zi}$ tends to zero and as $Z_i \to +\infty, e^{-Zi}$ increases indefinitely. Recall that e= 2.71828.

micro level. If we have data on individual families, OLS estimation of (7) is infeasible. $P_i = 1$, if growth of workers' remittance is high and $P_i = 0$, if growth of workers' remittance is low. These values directly into logit, $L_{i,}$ we obtain:

$$L_i = In\left(\frac{1}{0}\right) \quad \text{if growth of workers' remittance is high}$$

$$L_i = In\left(\frac{0}{1}\right) \quad \text{if growth of workers' remittance is low}$$

Obviously, these expressions are meaningless. Therefore, if we have data at the individual, or micro, level, we cannot estimate (7) by the standard OLS routine. In this situation we may have to resort to the maximum likelihood (ML) method to estimate the parameters.

Empirical Logistic Regression Model

To estimate the model, a widely used multiple logistic regression frameworks are taken to separate out the effects of key socio-economic factors of explanatory variables impact on growth of workers' remittance. A consistent time series data on remittance skill allied factors are not available for this cases we take cross section data. Using the survey data, a logistic regression model has been estimated to examine how to growth of remittance based on various explanatory variables.

In the following analysis, Logistic regressions have been presented with the dependent variable as an indicator of the probability of being in remittance. Dependent variable dummy for three status of remitter (= 1, if a skilled workers' receive remittance '> TK. 50,000' for every month, otherwise a semi-skilled remittance is 'TK. 20,001 to 50,000' or unskilled remittance is '< TK. 20,001') have been included.

Dependent Variable:	
log of received workers' remittance	= 1, if a workers' receive skilled remittance, otherwise a semi- skilled remittance or unskilled remittance
Explanatory Variables:	
Age of remitter	'15-25 years', '26-35 years', '36-45 years' & '45+ years'
Sex of remitter dummy	Sex (1= Male, 0 = Female)

Education of remitters	'VoT', '< class 5', 'class 6 to 10', 'class 11 to 12' & '> class 12'
Years of emigrant	'1-5 years', '6-10 years', '11-15 years', '16 years' and 'Above'
Remittance Country	'Middle East', 'South East Asia', 'Europe', 'Africa' and 'Others'
Skill remitter dummy	= 1, if a remitter skill is used, otherwise
Skill training providers	'Government', 'NGO', 'Association' & 'IDA'
No. of dependent members	'<4 members', '4-6 members', '7-9 members', '10 members' and 'Above'
Professional service of remitters	'Welding/Electrician', 'Agricultural workers', 'Construction worker', 'Drivers', 'Cleaners', 'Company job', & 'Hotel employee'
Amount of loan	'< TK. 100,000', 'TK. 100,001 to 300,000', 'TK. 300,001 to 500,000' & '> TK. 500,000'
Sources of borrowing	'Relative/ Neighbour/ Friends', 'Mahajan', 'NGO' & 'Banks'
Collateral for loan	'Nothing', 'Land and building', 'Machinery and equipment', and 'Personal assets of owner'
Rate of interest annually	'Nothing', '< 15%', '15% to 20%' & '> 20%'
Cooperative bank dummy	= 1, if have idea of cooperative bank, otherwise

The expected sign of explanatory variables coefficients are positive and or negative respectively. The error term is assumed to be random and serially independent having zero mean with finite variance. In order to determine the appropriate technique of estimation, the empirical model is estimated by logistic regression method. The direction and the strength of between the explanatory variables and log of remittance variability are determined from the sign of the coefficient and significance of *t-statistic*. To verify the validity of the model, a major evaluation criterion were used, the a–priori expectation criteria,

which is based on the signs and magnitudes of the coefficients of the variables under investigation.

Analysis of the Results[2]

This analysis begins with an attempt to understand the relationship of allied factors of labour market and status of labour with full employed, under/unemployed. Since most modern statistical packages have routines to estimate logit models on the basis of ungrouped data, let us interpret the regression results using the data and estimate equations in the logit form of the regression results, calculated by *E-views 7* (Table no. 2).

Table no. 2. Determinants of Workers' Remittance Status: Results of Logistic Regression

Dependent Variable: Received Workers Remittance

Variable	Coeff.	Std. Error	t-Stat.	Prob.
Constant	-29.12	5.32	-5.47	0.00
Age of remitter	2.76	0.86	3.21	0.00
Sex of remitter dummy (male=1)	3.21	1.38	2.32	0.04
No of dependent members	0.98	0.42	2.33	0.04
Years of emigrant	1.92	0.51	3.76	0.00
Education of remitter	-3.16	1.07	-2.95	0.01
Country of remittance	4.21	0.73	5.73	0.00
Professional service of remitter	1.95	0.56	3.48	0.00
Skill of remitter dummy (yes=1)	2.62	0.49	5.31	0.00
Skill training providers	1.56	0.33	4.73	0.00
Amount of loan	0.87	0.26	3.35	0.00
Sources of borrowing	0.74	0.24	3.08	0.00
Collateral for loan	-0.69	0.25	-2.76	0.01
Rate of interest annually	-2.72	1.13	-2.41	0.03
Cooperative bank dummy	3.78	1.12	3.36	0.00
McFadden R-squared	0.73			
LR statistic (14 df)	91.47			
Probability(LR stat)	0.00			

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[2]After operating analysis in software Econometric Views-7 have built-in routines to estimate the logit model at the individual level.

Each slope coefficient in this equation is a *partial slope* coefficient and measures the change in the estimated logit for a unit change in the value of the given regressor, assuming other regressors constant. The constant coefficient of -29.12 suggesting a relationship between the two variables show statistically highly significant with other variables constant, but negative sign means if an individual has no education, skills, training, money and others. Among the individual's characteristics, age of remitter and number of dependent members have expected influences. To capture the effect of gender, sex of remitter (male=1) have a significant impact on the received workers remittance, because female remitter participant rate is very tiny, and many female headed households receive remittance from male remitter.

Professional service of remitter and remittance country makes significant difference in growth of remittance and reflects the relatively higher log of remittance in Bangladesh. Specifically remitters' professional services ('welding/electrician', 'agricultural workers', 'construction worker', 'drivers', 'cleaners', 'company job', 'hotel employee') and remittance country ('Middle East', 'South East Asia', 'Europe', 'Africa') both are significant positive coefficients, and thus are making a larger contribution to the growth of remittance. Thus, the country of remittance coefficient of 4.21 means, with other variables hold constant, that if country of remittance increases by a unit, on average, the estimated logit increases by about 4.21 units, suggesting a positive relationship between the two. Similarly, Years of emigrant has a positive impact on growth of remittance in our equation, if a year of emigrant increases by a unit, on average the estimated logit increases by about 1.92 units.

The education coefficient of the remitter is negative and highly significant. The negative coefficient reflects that the relatively low educated workers are most of the emigrant workers, and when a person gets more education they are not working as workers in home and abroad determining a higher unemployment rate among the more educated. On the contrary, the coefficient of skill training providers ('Government', 'NGO', 'Association' and 'IDA') and skill of remitter of dummy form (yes=1) is positive and significant in the equation.

The amount of loan coefficient is positive and statistically significant. Similarly, the remitter may have sufficient scope for borrowing from 'relative/neighbor/friends', mahajan, NGOs and banks. Collateral for loan ('land and building', 'machinery and equipment',

'personal assets of owner') are not only obstacles. The rate of interest coefficient can have a significant impact on growth of remittance. The coefficient of cooperative bank of dummy form (yes=1) is highly statistically significant. Cooperative bank is likely to have a positive effect through its significant impact on log of remittance in Bangladesh.

However, together all the regressors have a significant impact on the log of remittance, as the LR statistic is 91.47, whose *p-value* is about 0.000, which is statistically significant. A more meaningful interpretation is *in terms of odds*, which are obtained by taking the antilog of the various slope coefficients. Whereas the McFadden R^2 (R^2_{MCF}) value is 0.73, although, this value is overplaying the importance of goodness of fit in models, where the regressand is dichotomous. Skill development needs for earnings will increase substantially if workers could be abroad fulltime employed with appropriate skills and trainings.

Summary and Conclusion

As indicated above, workers' remittance plays a significant role in the promotion of targeted economic growth in Bangladesh. Despite the consequences, worker's remittance spending on investment being low, even a small portion can help to alleviate liquidity constraints and directly contribute to growth. This is especially compelling for Bangladesh given that employment overseas helps somewhat in alleviating under/unemployment pressures at home. We anxious, however, low growth of worker's remittance is the causes of weakness of the performance of the labor market. Deficiencies of skill and inadequacies of educational attainment are factors behind the low growth of remittance. It can be assumed that skill remittance factors might be significant in becoming skilled employed on particular sectors and particular top destination countries. We observed that skill employment is the predominant type of employment of farm and nonfarm sector, both in home and abroad.

The logistic regression result is difficult to predict on the basis of only empirical data. This empirical result suggests that log of remittance have been estimated to obtain the effect of significant coefficient of allied factors of remittance, which also might be found the most significant in case of skill development training and access to credit for remitters, other things remaining the same. There is a correlation between per-capita remittance and their skills which are complementarities for the growth process. The key features of the

strategy include need oriented, multitasking skill and flexible training to meet changing needs of potential industrialization, overseas employment and self employment.

A priori condition of growth and development is important of its allied factors, one of them is labour force which is required to quality maintained, and they have to ability in shaping nation for this necessity to access skill development allied factors that gather pace for remittance employment generation. We should set minimum standards of vocational training, financial scheme and its related facilities. Improvement should be carried out in quality of training of instructional and management staff. It is expected that, together with GoB, national/zonal NGO's and IDA (International Development Agency) will form part of the skills development revolution in Bangladesh. Thus, attention should be given to expansion of allied factors which incremental productivity of remitters in Bangladesh. Consequently, it can be concluded that a strong significant statistical correlation seems to exist with the number of emigrant workers and in the long run their skills will maximize remittance in Bangladesh.

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Does Education matter for inclusive Growth? The Nigerian Case

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Abstract

This study examines the role of education in enhancing inclusive growth in Nigeria for the period 1980 to 2014. The study utilizes the Dynamic Error Correction model and the results show that tertiary enrolment positively and significantly enhanced average income, while secondary enrolment and literacy rate positively, but insignificantly, enhanced per capita GDP. Also, tertiary enrolment and secondary enrolment negatively and significantly enhanced unemployment, but literacy rate positively impacts unemployment confirming the existence of graduate unemployment in Nigeria. Skills development programmes are therefore recommended to be incorporated into the education system in order to increase economic growth participation and benefit sharing with a view to promoting inclusive growth in Nigeria.

Keywords: education, enrolment, literacy rate, inclusive growth, Nigeria

Introduction

Education has been described as a very key determinant that can spur the growth of any economy (Glewwe *et al,* 2014; Benos and Zotou, 2014; Mariana, 2015). However, due to the questions emerging from the literature as to whether the expansion of tertiary education can make growth to trickle down (Bohm *et al.,* 2015), it becomes expedient for economic scholars to re-echo the need to understand the puzzle surrounding the concept, importance and implications of inclusive growth. Inclusive growth has been described as the sole means to rectify the severely entrenched regional imbalances, inequities and to consolidate economic gains (World Bank, 2006). This assertion becomes very important because inclusive growth is not only concerned with growth in national income, per-capita income or economic growth generally, but it is concerned with how the national income is accumulated, how it is distributed and how are its benefits shared. It emphasizes the participation of everyone in the economic growth process, as it pertains to decision-making in the organization of the growth progress and in partaking in the process of growth itself. Moreover, it stresses the need for every member of the society to share impartially in the growth benefits.

Consequently, inclusive growth as a concept incorporates participation, as well as benefit-sharing. Accordingly, participation deprived of benefits sharing makes the growth process unjust, and then benefits sharing deprived of participation makes growth a welfare outcome (Ramos and Ranieri, 2013). It also emphasizes issues on empowerment, vulnerability and security. It also focuses on how natural resources are explored and exploited by the present generation, without reducing the quantity available for future generation. As indicated by Ali (2007a), "the new mantra at the heart of economic development now is inclusive growth." It is therefore expected to focus on the marginalized, the poor, the disadvantaged, the neglected and the deprived sections of the society (Tilak, 2007). Inclusive growth is not just about the trickling down effect of growth, but also concerns with its spread. To take it further, inclusive growth in the recent focus of economic enquiry has been linked to the issues of education and health (Ali, 2007a; Tilak, 2007; Manafi and Marinescu, 2013; Bohm *et al*, 2015).

The inclusiveness of growth to a very large extent depends on the extent of access to economic and social opportunities (Adedeji *et al,* 2013), most especially at education. Education has been described as a very important ingredient in inclusive growth. This is because education is critical to the human capital development. Ravallion (2004) linked investments in education to economic development outcomes. It is believed that once human capital is well developed in terms of access to quality education, income inequality reduces, because education is seen as the opium of the poor as it can help lift them out of poverty. This implies that human capital development should include investments in those activities that enhance vocational skills and income earning potentials of the citizens. A country's ability to educate its vast population must not only be determined by enrolment rates or schooling, but also on the capacity of such country to provide the skills, knowledge and competencies required to effectively perform in broader society (Adedeji *et al,* 2013).

In the light of the foregoing, this study attempts to determine if education matter in promoting inclusive growth in Nigeria, by analyzing the impact of school enrolment on inclusive growth variables and determining the effect of literacy rate on inclusive growth. The previous related studies in that field either only focused on education and economic growth (Barro, 1991; Bhargava, 2008; Benos and Zotou, 2014; Bohm *et al,* 2015; Mariana, 2015), or discussed the influence of education investment on inclusive growth (Manafi and Marinescu, 2013). This present study will attempt to bridge a noticeable gap in literature by decomposing education into literacy rates and school enrolment, and then determine their individual effects on inclusive growth variables. The study also expands the frontiers of knowledge by modeling inclusive growth, as previous studies have only conceptualized inclusive growth, or analyzed it descriptively.

Literature Review
This literature review is examined from conceptual, literature and theoretical review points of view. The conceptual review sheds light on the issues generating extensive discussion in literature, regarding the concept of inclusive growth. They include inclusive growth, social protection, inclusive green growth and human capital investment. These concepts play a pivotal role in making growth inclusive, social protection and inclusive green growth, respectively guarantees fairness

in sharing the benefit of growth and in striking a balance between taking care of the need of present generation without making future generation worse off. Human capital investment also plays a key role in making growth inclusive, by expanding the range of choices available to an individual, as well as increasing the rate of participation in the growth process.

1. Conceptual Review
Inclusive Growth

In the economic literature, most scholars agree that inclusive growth should include the following striking features: (i) Inclusive growth should reduce inequality, poverty and provide benefit to the marginalized in the society. (ii) It is more than national income or increase in output. (iii) It should place emphasis on benefit sharing and participation in the growth process. (iv) It requires sustainable growth. (v) It emphasizes equal opportunities for all, not just the poor, because it is concerned with making opportunities available and accessible to all (Ali and Zhuang, 2007; Ali and Son, 2007). Inclusive growth is therefore conceptualized as the pace and distribution of economic growth (Anand *et al,* 2014). It is also seen as the type of economic growth that focuses on creating economic opportunities to all, especially to the poor. To this end, inclusion has been defined as an improvement in the fraction of the bottom half of the population in the mainstream band, in the mainstream economic activity of a country (Suryanarayana, 2013). This implies that inclusion can be conceptualized in terms of the percentage of the bottom half of the population that are in the mainstream band.[1]

Social protection

A key concept in inclusive growth is social protection. This is because it is very important for promoting equality, justice and equity. Social protection is an important tool for the government to reduce poverty through the redistribution of income and direct transfers (CAFOD, 2014) [2]. As observed by the African Union and other national governments, social inclusion is seen as a policy tool to address

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[1] Anyone whose income is less than the threshold, that is, 60 per of the median is considered deprived (see Suryanarayana, 2013) for details.

[2] CAFOD is the official Catholic Aid Agency for England and Wales.

development challenges (Holmes *et al,* 2012; CAFOD, 2014). Social protection entails the policies and programmes that are designed to ameliorate vulnerability and poverty through the promotion of efficient labour markets, reducing people's exposure to risks, as well as enhancing their capacity to manage all forms of social and economic risks like old age, sickness, unemployment, disability and exclusion. The recent international calls for governments all over the world to invest in social protection is hinged on the argument that social protection programmes and policies will lend support to a more equitable pro-poor growth model, by supporting both, economic and social development (Holmes *et al,* 2012).

Inclusive Green Growth

Green growth is primarily concerned with securing the welfare of future generations, while inclusive growth, on the other hand, focuses on the welfare of current generations, as well as ensure an equitable distribution of welfare gains. This means that tensions are generated between green growth and inclusive growth, since green growth is not inclusive automatically and inclusive growth may not always be green (CAFOD, 2014). Green growth focuses on future generations' welfare and this may pose serious limits to growth for the current generation. If additional measures are not embarked upon, this could have serious adverse effect on the amount of wealth or economic resources that will be available for the current generation, thereby negatively affecting the welfare of the poor and the vulnerable. Moreover, green growth and inclusiveness may not always go together, because distributional fairness most often conflicts with the efficient use of resources (Bouma and Berkhout, 2015). Thus, it may be impossible to create synergies between green growth and inclusiveness and as such, the quest to balance the disparity will require additional efforts (Dercon, 2012).

Human Capital Investment

Human capital is very important to economic growth because of the economic value of knowledge, which can be expressed in concrete terms as in income levels (Shultz, 1971). In achieving inclusive growth as well as promoting social and economic development, the quality of human resources and an accumulated knowledge of labor acquired through skills development and quality education have a decisive role to play (Tilak, 2007). This implies that efforts to promote inclusive growth

should be targeted at improving educational quality and skills acquisition. As identified by Schultz (1971), education is equal to human capital investment. This follows that attempts by the government to invest hugely in education is also an attempt to invest in human capital, and this will translate to human capital development. If the result of human activities and work ethics can be improved upon by education, it has beneficial effects on competitiveness (Tandi, 2013). If, however, the issue of human capital is approached from the side of economic growth as a large part of the income gap is explained by differences in education, it is seen as an investment (Schultz, 1971). If the national income of a country is growing faster than the country's resources, then that is said to be efficiency (Tandi, 2013). This is because a country can only be able to increase its output above its natural resources if the human capital is well developed thereby making labor productivity to be very high leading to more income per unit of national resource or labor input. One important part of the increase in national income over and above national resources is the realization of economies of scale, but also to a large extent, a considerable proportion is caused by the improvement of human skills (Tandi, 2013). It has been established that large increases in the real income of workers can be attributed to the return on human investment (Schultz, 1971).

2. Theoretical literature review
Solow Neoclassical Growth Theory

This theory was exhaustively tested in Mankiw et al (1992) and later in McDonald and Roberts (2002). According to these studies, the Solow model will better fit the data, if an additional variable - human capital – can be introduced, thereby leading to significant improvement in the ability to explain the disparities in incomes across countries. In order to determine the limitations listed above, Mankiw *et al* (1992) employed another means of modern econometric techniques by selecting countries with series that show similar stochastic properties to be able to develop reliable estimates of appropriate physical capital. To this end, such procedure intensifies and stimulates a fresh empirical interrogation of the Solow growth theory, which has been able to generate new proof on the behavior of income inequality across countries. As of recent, the plethora of outstanding advances in econometric techniques has engendered a set of new assessments for

growth theories in the field of economics. To keep pace with this trend, Islam (1995) made a vital contribution by reporting parameter estimates of a neoclassical model that employed a cross sectional panel data method. By so doing, the study advocates for leveling effects in different countries as heterogeneous static intercepts in a dynamic panel analysis. In a nut shell, while the findings of Mankiw *et al* (1992) permit us to finalize that an important role is performed by human capital in the production function, Islam (1995) will suggest an opposing view if it is possible to introduce into the model, a country's specific technological progress.

The Endogenous Growth Theory

This theory suggests that growth is generated as a direct result of internal processes from within a system. In a specific way, the endogenous growth theory confirms that the enhancement and development of a country's human capital can help propel a higher growth of an economy through the development of modern technology as well as an effective and efficient production method. This contradicts the neoclassical economics' view which claims that economic growth is propelled by progress in technological competence and other external factors. Endogenous growth theorists (e.g. Romer, 1986, 1990, Lucas, 1998) contend that today's industrialized countries are experiencing a high productivity and economic progress compared to those in the pre-industrialized eras, due to the fact that such economic progress was developed and sustained within the country rather than through international trade. According to the theory, human capital investment (labor force quality) is an important component of economic growth.

Empirical literature review

Education has been identified in economic literature as a veritable tool that can enhance the social and economic development of a nation. To this end, some studies like Barro (1991), Bhargava (2008), Benos and Zotou (2014), Bohm et al (2015) and Mariana (2015) have focused on the role of education in enhancing economic growth. Others like Holm *et al* (2015), Tilak (2007), and Tandi (2013) beamed searchlight on the subject matter of education and inclusive growth, while Manafi and Marinescu (2013) looked at the influence of education investment on inclusive growth.

For instance, Holm *et al* (2015) researched into the role of education in the quest for sustainable development and quality assurance among Chinese and Nordic countries' universities. According to the study, the global purpose of education for sustainable development (ESD) is to incorporate it at every level of education. It thus implies that to ensure sustainable development, several changes have needed to be embarked on, for instance, through the transforming of the university system. It was reported that Nordic countries like Norway, Sweden, Iceland, Denmark and Finland struggle to be represented among the countries leading the way in promoting education for sustainable development, and therefore, seek to increase cooperation with China. The study compared the Nordic countries with China in terms of ESD and quality assurance. It looked into the possibilities to advance ESD in these countries in order to provide benefits from quality assurance requirements and observed that both regions improve education for sustainable development.

Tilak (2007) studied the relationship between education and inclusive growth on the approach to the eleventh plan. The study describes education as the focal point and the most important factor in human empowerment. It supports the fact that education can help bring people out of poverty by endearing people with the necessary knowledge and skills, as well as providing for them access to gainful employment which can help translate to inclusive growth. The paper critically examined the attention paid to education, the strategies that have been proposed for it and the goals set for it to propel growth inclusivity. It therefore called for good quality education, as the most important ingredient of inclusive growth.

Tandi (2013) looked at education as an important element of smart and inclusive growth. It identified smart and inclusive growth as the main elements of Europe 2020 target, and in order to achieve this target, a high quality and performance of the education systems is needed. Furthermore, the paper suggested an efficient education as the engine through which the goals of a smart and inclusive growth can be achieved.

Barro (1991) conducted a study on the role human capital plays in promoting economic growth. The study which covered a period of 1960 to 1985 focused its searchlight on 98 countries, employing school enrolment rates to proxy human capital. In the study, result showed that initial human capital enhanced the growth rate of real GDP. Marinescu

and Manafi (2013) researched into the role that education expenses play in Romania and European Union's inclusive growth. The study observed that most European Union countries will be able to reach the inclusive growth target set by 2020. It also suggested that for Romania to be able to achieve the EU 2020 inclusive growth target, it has to boost its efficiency in education through constant training of education managers, as well as optimizing school network.

Bhargava (2008) estimated the models for growth rates of GDP, the levels of poverty, and measures of inequality from 1990 to 2000 across 54 less developed economies at five-yearly intervals. The study investigated globalization issues through the analysis of the differential effects of imports and exports in these countries, through the use of trans-logarithmic models which makes possible for non-linear effects of literacy rates and openness measures. It was observed that literacy influenced the rates of growth in a quadratic manner. Similarly, countries with higher literacy rates were found to be more likely to profit from globalization. However, it was observed in the models of poverty measures employed, that globalization did not directly affect the level of poverty in these countries.

McKinley (2010) studied inclusive growth criteria and indicators. In the study, inclusive growth was identified as entailing the achievement of sustainable growth that will help to create and enlarge opportunities in the economy, as well as facilitates broader access to such opportunities in order to enable members of the society become included in both participation and sharing of economic progress. One of such indicators of inclusive growth identified in the study is quality education. This view was also supported by Ali (2007b) which focused on the imperativeness of inequality on inclusive growth in Asia. The paper identified the key elements in inclusive growth as productivity and employment, targeted intervention, social safety nets and development in human capabilities.

It is evident from the above review that previous studies have only been able to either link education to economic growth, or discussed the issue of education investment and economic growth. They have also not been able to determine if education plays a crucial role in making growth inclusive, with the exception of Tilak (2007), Tandi (2013) and more recently, Holm *et al* (2015), which failed to disaggregate education. This present study will not only decompose education into literacy rates and school enrolment to determine their individual effects

on inclusive growth, but will also extend the frontiers of knowledge by empirically modeling inclusive growth which most of the previous related studies have not done.

3. Methodology and Data
Model Specification and Method of Analysis

This study focuses on the relationship between education (proxied by literacy rates and school enrolment) and inclusive growth in Nigeria from 1970 to 2014. Following the works of Ali and Son (2007) as well as Anand *et al* (2013) where inclusive growth was measured in terms of the contribution of the increase in per-capita income, as well as the contribution of changes in income distribution (equity) as follows:

$$y^* = \omega \; x \; y \qquad\qquad (1)$$

where y^* is the degree of inclusive growth, ω is the equity index of income, and y is the average income. It thus implies that Inclusive growth will require increasing y^*, which can be done by: (i) increasing the income equity index ω by increasing equity in income distribution; (ii) increasing per-capita income through increasing the real output in the economy; or (iii) by combining both (i) and (ii).

If equation (1) is differentiated totally, we have:

$$dy^* = \omega.d\omega + y.dy \qquad\qquad (2)$$

Equation (2) means that dy^* is the change in the degree of inclusive growth. And growth will be more inclusive if $dy > 0$ i.e. if there is a positive change in the degree of inclusive growth (Ali and Son, 2007; Anand *et al,* 2013).

Equation (2) also allows the decomposition of inclusive growth into change in equity and income growth (Ali and Son, 2007). In the equation, the first term represents the contribution of increase in per capita income while keeping the distribution of income constant. Moreover, the second term indicates the contribution of changes in the distribution of income while keeping per capita income constant (Ali and Son, 2007; Anand *et al,* 2013). For the purpose of the objectives of this present study, we expand the model to accommodate other variables that can contribute significantly to inclusive growth, such as literacy rate and school enrolment rate. It is already established that both

variables will contribute greatly to human capital development and make growth more inclusive. Therefore, equation (2) becomes:

$$y^* = \{GDPPC, UNEM\} \tag{3}$$

Equation (3) is the inclusive growth determinants this study will focus on. It implies that the degree of inclusive growth is a vector inclusive growth determinant i.e. of average income and unemployment rate. Real GDP Per Capita (GDPPC) is a measure of welfare and it is used to capture benefit sharing while unemployment rate (UNEM) is used to capture the extent of participation in the growth process or income equity. Therefore, the model to be estimated in this study is specified as:

$$GDPPC = \alpha_0 + \alpha_1 TE + \alpha_2 SE + \alpha_3 LR + \alpha_4 INV + \alpha_5 INF + \varepsilon \tag{4}$$

$$UNEM = \beta_0 + \beta_1 TE + \beta_2 SE + \beta_3 LR + \beta_4 INV + \beta_5 INF + \varepsilon \tag{5}$$

Inclusive growth variables in equations (3) and (4) are Real Gross Domestic Product Per Capita (GDPPC) and Unemployment rate (UNEM). GDPPC is average income to m are Real GDP Per Capita and Unemployment rate respectively. TE is the Tertiary Enrolment, SE is the secondary enrolment, LR is literacy rate, while the control variables are investment (INV) which is captured with gross capital formation and inflation rate (INF). Log linear is employed in carrying out the analysis in order to avoid unnecessarily large values in the estimated result. The dynamic error correction model is also employed because it allows for deviation of the current state from long run relationship to be corrected with short run dynamics. This means that once the variables are first differenced, the dynamic error correction model is more appropriate.

Data Description and Sources

Data for this study, such as tertiary enrolment, secondary enrolment, literacy rate and unemployment were sourced from the Nigeria Bureau of Statistics (2015). Others such as investment (proxied with gross capital formation), inflation rate and real GDPPC were sourced from the World Development Indicators (2015).

Results and Discussion

**Trend Analysis of Education and Inclusive Growth in Nigeria**

Figure no. 1 illustrates the trend of secondary enrolment in Nigeria during the period 1980 to 2014. It clearly shows that secondary enrolment since 1980 has witnessed an upward surge until year 2005, when secondary enrolment dropped sharply in Nigeria. Figure no. 2 shows clearly that tertiary enrolment has also been on the rise since 1980, with occasional sluggishness around 2004 and 2008, but since 2009 up to 2014, tertiary enrolment in Nigeria continues to grow very fast. Comparing these two figures, it is clear that prior to the late 1990s as well as late 2000s, secondary enrolment in Nigeria was very huge, though with a fairly stable growth rate.
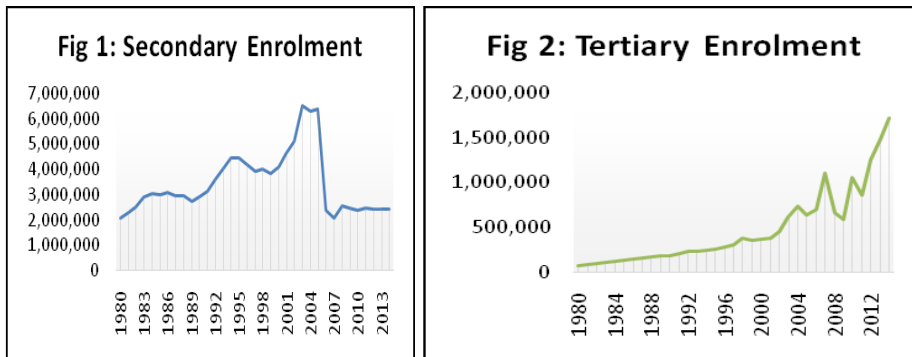
Source: Nigeria Bureau of Statistics (NBS)

Secondary enrolment grew very fast in Nigeria between 1999 and 2004 during the first return of democracy to Nigeria, when the government was able to stimulate more secondary enrolment in a quest to achieve one of the millennium development goals of raising the basic literacy rate in the country. However, the trend after 2006 until recently shows that the country needs to do more to boost secondary enrolment in order to increase participation in the growth process and make growth more inclusive. Conversely, fig. no. 2 suggests that tertiary education started very slowly from the early 1980s. This is unconnected with the fact that tertiary education was less pronounced in Nigeria, then due to several factors ranging from the fact that many families considered tertiary education as a luxury, or due to its affordability. This means that

it continued to grow slightly till the late 2000 again, when it begins to witness significant increases during the democratic era up to date.

Fig 3: Literacy Rate
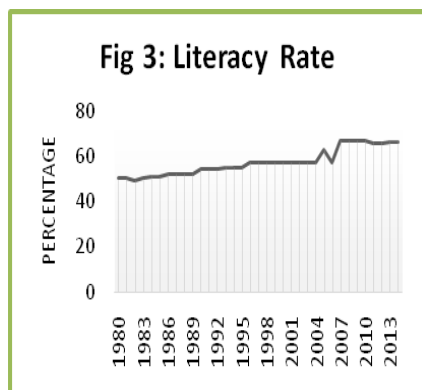
Fig 4: GDP Per Capita
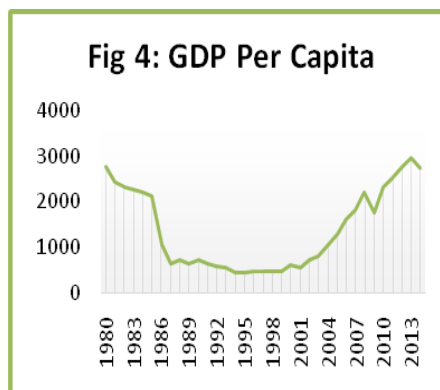
NBS (2015)　　　　　　　　　　**WDI (2015)**

The trend of literacy rate and real GDP Per Capita are presented in figure 3 and 4 respectively. In figure 3, literacy rate in Nigeria has revolved around 50% since 1980 up till early 2000 where it rose to about 62%. Between 2004 and 2014, literacy rate has continued to witness significant growth in the country. This is unconnected with the fact that school enrolment, especially, tertiary enrolment, has continued to rise significantly in the country since the return of democracy in 1999. The trend of GDP Per Capita in figure 4 suggests that the average income of Nigerians has been on the decline despite economic growth being witnessed in the country. Despite the huge oil revenue of the country, the citizens are still among the poorest in terms of income up to date. It is a fact that the minimum wage in Nigeria is just eighteen thousand naira (N18, 000) which is almost ninety US dollars ($90). Among the Oil Exporting Countries, Nigeria has the lowest GDP Per Capita at $2,994 in 2013, compared to Qatar, UAE, Algeria and Angola, with GDP Per Capita of $100,829, $46,833, $5,845 and $6,282 respectively, in 2013 (OPEC Annual Statistical Bulletin, 2014). This is in spite of the fact that the country is the sixth largest oil producer in the world. Nigeria's GDP Per Capita was at its lowest ebbs between the late 1980s and the early 2000. This implies that the citizens' welfare or perhaps, standard of living over this period is very low. Even until recently that the GDP Per Capita continues to rise significantly, the minimum wage still attests to the fact that a lot needs to be done if benefit sharing is to increase for growth to become inclusive.

Fig 5: Unemployment Rate

Source: Nigeria Bureau of Statistics (2015)

Figure no. 5 shows the unemployment rate over the period of 1980 to 2014. Unemployment rate in Nigeria shows a consistently rising trend. Unemployment rate in Nigeria initially witnessed a fairly stable and low rate between 1980 and 1988. It decreased greatly between 1988 and 1995, and this period signaled a good omen for the country. The period between 1995 and 2000 also witnessed a slight increase in unemployment, but it is still below 5% during this period. However, between year 2000 and 2014, unemployment rate in Nigeria has continued to rise uncontrollably. It even reached an all-time height in 2013, when unemployment rate in Nigeria rose to about 23.9%. This increase in unemployment, especially between 1999 up to date can be attributed to the increase in tertiary enrolment observed earlier in fig. no. 2. This means that the country has failed to make arrangement to accommodate graduates that are being turned out on a yearly basis by the various tertiary institutions. Also, the curriculum in these tertiary institutions put more emphasis on theoretical courses and less emphasis on practical courses, thereby making graduates to depend endlessly on white collar jobs.

Pre-Estimation Tests

Table no. 1. Stationarity Test

Variables	ADF-Statistic	Critical Values	Status
GDPPC	-4.603648	1% = -3.646342 5% = -2.954021	First Difference
SE	-5.067524	1% = -3.646342 5% = -2.954021	First Difference
TE	-7.229266	1% = -3.646342 5% = -2.954021	First Difference
UNEM	-5.340464	1% = -3.646342 5% = -2.954021	First Difference
LR	-10.93118	1% = -3.646342 5% = -2.954021	First Difference
INF	-5.776598	1% = -3.653730 5% = -2.957110	First Difference
INV	-7.693038	1% = -3.646342 5% = -2.954021	First Difference

Source: Authors' computation (2015)

The unit root test result in table no. 1 implies that the time series variables, Per Capita real GDP, secondary school enrolment, tertiary enrolment, unemployment, literacy rate, inflation rate and investment are not stationary at levels and after taking their first difference, they are all stationary for linear trend test models. This indicates that the incorporated series in the dynamic regression model have no unit-root at first difference and it implies that the series (in their first difference) are mean reverting and convergences towards their long-run equilibrium.

Table no. 2. Johansen Cointegration Test

Hypothesized No. of CE (s)	Trace Statistic	Prob.**	Hypothesized No. of CE (s)	Max-Eigen Statistic	Prob.**
None *	147.0510	0.0013	None *	50.04445	0.0187
At most 1 *	97.00653	0.0409	At most 1	35.31530	0.1562
At most 2	61.69123	0.1871	At most 2	20.62241	0.7122
At most 3	41.06882	0.1865	At most 3	16.67460	0.6080
At most 4	24.39421	0.1843	At most 4	14.37073	0.3354
At most 5	10.02348	0.2789	At most 5	7.485091	0.4335
At most 6	2.538393	0.1111	At most 6	2.538393	0.1111

Note: * denotes rejection of the null hypothesis at 5% level of significance

In table 2, the Trace statistic results indicates that there exist two co-integrating equations at 5% level of significance, while the Maximum-eigenvalue statistic shows that there is one cointegrating vector at 5% significance level. These results suggest that there is long-run relationship among all the variables employed in the study.

Dynamic Error Correction Model

Table no. 3. Education and Real GDP Per Capita in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.006544	0.014281	-0.458234	0.6557
D(LTE)	0.157204	0.061173	2.569827**	0.0404
D(LSE)	0.097504	0.074332	1.311737	0.1514
D(LLR)	0.356858	0.481216	0.741574	0.4739
D(LINV)	-0.125687	0.069772	-1.801391*	0.0991
D(LINF)	-0.010889	0.017038	-0.639108	0.5358
D(LGDPPC(-1))	0.815291	0.314806	2.589819**	0.0251
D(LTE(-1))	0.022271	0.052255	0.426208	0.6782
D(LSE(-1))	-0.000970	0.077987	-0.012437	0.9903
D(LLR(-1))	0.550621	0.356297	1.545400	0.1505
D(LINV(-1))	-0.029363	0.056010	-0.524236	0.6105
D(LINF(-1))	0.037367	0.015166	2.463885**	0.0315
ECM(-1)	-0.431655	0.155207	-2.781155***	0.0012
R-squared		0.605743		
Adjusted R-squared		0.525644		
Prob. (F-statistic)		0.009022		
Durbin-Watson stat		1.933199		

Note: *, **, *** means significant at 1%, 5%, 10% respectively

Table no. 3 shows that coefficient of the error correction model $(ECM_t(-1))$ conforms with apriori expectation because it is negative and also significant. It's value of -0.431655 means that the speed of adjustment towards long run equilibrium state is 43.17%. It also means that about 43.17% divergence due to the equilibrium error in the previous year was corrected in the next period meaning that the adjustment speed towards long run is good.

The results in table no. 3 shows that tertiary enrolment of the current period positively and significantly enhanced Per Capita real GDP in Nigeria over the period of study. Also, current secondary school enrolment and current literacy rate positively enhanced Per Capita real GDP, but insignificantly. This conforms to apriori expectation and the reason for this is not far-fetched, because if both tertiary and secondary enrolments are well managed, they will contribute to human capital development, which will in turn produce more economic growth for the country. From the trend analysis on tertiary enrolment, it is clear that it has continued to rise significantly over the last fifteen years, whereas secondary enrolment has been on the decline lately. Also, tertiary education has formed the yardstick for securing employment lately in Nigeria and this explain the reason why it is significant in stimulating Per Capita GDP. Secondary education is not significant because unlike the pre 1990 era when it was important in securing employment, that has since changed as most a secondary school certificate holder is only considered for menial jobs in the present day labor market in Nigeria. In the same vein, literacy rate has been insignificant, and is stimulating Per Capita real GDP because the effect education would have had on growth has been offset by graduate unemployment in Nigeria. The R-squared of 0.605743 means that it is a good model as over 60% changes in GDP Per Capita is explained in the specified model. The Durbin-Watson (DW) of 1.933199 suggests that the model does not suffer from serial correlation and it is not spurious because intercept (0.006544) is smaller than the DW.

Table no. 4. Education and Unemployment in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.206887	0.140691	1.470510	0.1694
D(LTE)	-0.187280	0.092943	-2.014998**	0.0380
D(LSE)	-0.455287	0.089738	-5.073514***	0.0000
D(LLR)	2.501734	2.659586	0.940647	0.2320
D(LINV)	-1.298517	0.596179	-2.178064*	0.0520
D(LINF)	-0.077704	0.164251	-0.473080	0.6454
D(LUNEM(-1))	-0.126216	0.247677	-0.509601	0.6204
D(LTE(-1))	0.098714	0.511398	0.193029	0.8505
D(LSE(-1))	0.158056	0.760815	0.207746	0.8392
D(LLR(-1))	0.912052	3.502457	0.260403	0.7994
D(LINV(-1))	-1.171917	0.535140	-2.189926*	0.0510
D(LINF(-1))	-0.091238	0.146768	-0.621647	0.5468
ECM(-1)	-0.967111	0.311436	-3.105328***	0.0000
R-squared		0.690748		
Adjusted R-squared		0.464799		
Prob. (F-statistic)		0.000000		
Durbin-Watson stat		2.073654		

Note: ***, **, * means significant at 1%, 5%, 10% respectively

Table no. 5 shows the impact of education on unemployment in Nigeria. It is clear from table no. 5 that tertiary enrolment of the current period and current secondary school enrolment negatively and significantly enhanced unemployment in Nigeria. This result conforms to apriori expectation because an increase in secondary and tertiary education is expected to endow the citizenry with the necessary qualification and skills that are required in the work place thereby increasing their employability and reducing unemployment in the process. Literacy rate, however, does not conform to expectation, because it positively impacts real GDP Per Capita. The reason that can be adduced for this is that as literacy rate increases in Nigeria, it makes more people becomes educated and ready for the labor market, but experience has shown that the labor market in Nigeria has become more saturated as the existing jobs offer in the country annually is far less than the number of graduates that are leaving various academic institutions, both secondary and tertiary. The implication of this is that more educated people are not able to get jobs and unemployment increases.

A cursory look at table no. 5, it is observed that the error correction equation (ECM$_t$(-1)) conforms to apriori expectation, because it is also significant and negative. It's value of -0.967111 means that the adjustment speed towards equilibrium long run state is 96.71% meaning that 96.71%% divergence owing to the equilibrium error in the past year has been corrected in the subsequent period implying that the adjustment speed towards equilibrium long run is fast. The R-squared of 0.690748 suggests that it is a good model as the explanatory variables jointly explained over 69% variation in real GDP Per Capita. The model is not spurious also as its intercept of 0.206887 is lesser than the DW of 2.073654. This DW value of 2.07 suggests that there is autocorrelation in the model and therefore, the error terms are not serially correlated.

Conclusions

The study examines if education matter in promoting inclusive growth in Nigeria between 1980 and 2014. Education was broken down into school enrolment and literacy rate. School enrolment was further decomposed into secondary school enrolment and tertiary enrolment. Inclusive growth was captured in the study with per capita real GDP, which is a measure of standard of living, welfare of the citizenry and benefit sharing, while unemployment was also employed to capture the extent of participation in the growth process. Thus, inclusive growth was captured with Real GDP per capita and unemployment rate in the study.

The dynamic error correction model was employed in the study to determine the various parameter estimates and how they impact inclusive growth. The unit root test conducted shows that all thee explanatory variables employed in the study have unit root at levels, but became stationary after first differencing. Also, the Johansen cointegration test shows that long run relationship exists among the variables because two cointegrating equations exist in trace statistic and one cointegrating equation exists in the Maximum-eigenvalue statistic. It was observed in the study that secondary school enrolment, tertiary enrolment and literacy rate have important role to play in promoting inclusive growth in Nigeria, owing to the fact that tertiary enrolment positively and significantly impacts GDP Per Capita, while secondary enrolment and literacy rate positively, but insignificantly enhanced GDP Per Capita. In the same vein, tertiary and secondary school enrolment negatively and significantly enhanced unemployment rate which implies

that improvement in education can help to increase participation in economic growth process, thereby reducing unemployment and making growth more inclusive. However, literacy rate was observed to positively impact unemployment in Nigeria, which is a confirmation of the fact that the products of the educational system in Nigeria have not been able to contribute to the growth process as they ought to because the labor market has not been able to absorb a large number of them and graduate unemployment has continued to increase from year to year.

It is therefore of importance that Nigeria should improve the quality of its education curriculum by incorporating skills acquisition courses that will make graduates less dependent on white collar jobs. Skills development initiatives should also be embarked on to discourage graduates from becoming job-seekers and transform them to employers of labor. This will not only reduce unemployment and boost per capita income, but will also increase participation in the growth process, increase benefit sharing and promote inclusive growth.

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The Contribution of Human Capital Investment in the Growth of East Asian Economy – A Literature Review

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Abstract
Human capital as the wealth of nation supports the economy in a variety of ways. This study intended to elucidate the significance of education, technology utilization and health investment in economic affluence of East Asia. The finding shows a significant relationship between human capital investment and economic growth in East Asia. Human capital investment has become an essential tool to determine nations productivity in both, micro and macro level. The findings come across to assume that, in order to be successful, HC investment through the improvement of technology, education and health system must be cautiously considered in any endeavor towards economic development and sustainability. The study concluded that a person with poor health, lack of knowledge or vocational training will offer less, theoretically, than a person who has been specifically trained or who has attained a higher level of education.
Keywords: human capital, individual capital, economic development, technology, investment

Introduction

Human capital (HC) is the major determinant of the economic development and sustainability. It concentrates on the productivity and innovation that molded in individuals which can not be separated from other development paradigms. Psacharopoulos and Woodhall (1997) described human capital as a positive reason of productivity to enlarge social, political and economic development.

In East Asia, human capital has become an engine of development as some of them spend a considerable amount of money to supplement their citizens with the highest level of knowledge technology and know-how. It also contributes in the performance of companies and increases individual per capita. More clearly, Son (2010) defined HC in Macro and micro economic perspective as the accumulation of individual capital that promotes labor productivity, facilitates technological advancement; maximizes returns on investment which can support poverty reduction (Son, 2010, p. 9).

In contrast, in micro aspects, HC is more combined with education and training skills that again maximizes profit. Accordingly, in this study we examine how some East Asian countries achieved certain level of development and ranked among the world most advanced countries in terms of technological advancement and innovation. We also elaborate the differences between South East and North East Asia, as most South East Asian countries are suffering from minor technological innovation. This study tries to investigate the factors behind the gaps in relation to human capital development. We lastly intend to comprehend whether they have the inclination to the proper economic strategy that interrelated to primary education, technological advancement, improving health system or not.

Human Capital Investment

Investment in human capital is considered as the major condition for the success of the economic policies. Individuals could not be well qualified to the workplace without the accumulation of HC. This study presumes that human capital investment can significantly influences economic growth.

Scholars like Marshall (1930) and Lucas (1988) investigated the significance of HC long times ago. Marshall alleged that the most important capital to be endowed is vested in human beings; Lucas (1988) conceptualized the term and correlated to economic growth. He

stated that returns on investment could be traced to the evaluation programs in which provides the solution and knowledge of worth specific organization and promotes the accountability of the agents. It was also argued, maintaining the improvement of human capital investment surges productivity, which basically relies on the level of HC per workers (Edgard and Cornachione, 2010, p. 32). In this case, the value-added productivity (VAP) for each employee could be traced through the utilization of the most advanced technologies. Furthermore, Barro and Sala-i-Martin (1997) contends that investment in the employees' skills creates a large scale of economic opportunities; therefore, it should not only vested in education, but other externalities should be deliberated with the purpose of maximizing the level of productivity. Otherwise, the effects on growth would be biased (Lange and Tope, 2005, p. 9-10).

Babbalola (2003) provides three core arguments that investment should be vested. The first argument is the transformation of knowledge from old generation to the new generation. That could be attained through communication channels and day to day interaction with youths to transfer their past experiences. The second argument is also allied with the first point; he suggests that new generation ought to be taught on utilizing their knowledge to innovate new products. The last argument is encouraging people to be creative and maintain their creativity through specific programs and knowledge that they possess (Olaniyan and Okemakinde, 2008).

In this regards, Thai government planned to maximize the quality of its citizens through the investment in both, virtue and knowledge for the period of 2007-2011 and it was one of the four most essential strategic plans of the Thai government to foster its socioeconomic performance. Furthermore, the National Development Planning Agency in 2006 formulated the Indonesian medium term development plan for the period of 2004 to 2009 entailed the development of human capital and nurturing the quality of the population for the labor market, in order to accomplish economic objectives.

The Vietnamese government introduced a socioeconomic strategy to promote human capital and improve the quality of the population for 2001-2010, though education and training. However, the slow economic growth has been noted due to the poor development strategy that prevented government to take full advantage of the

possessed human capital. According to the Vietnam's Ministry of Education, nearly 30% of the university graduates trained on the job they are intended to do (Phan & Coxhead, 2013). Also, the education infrastructure and the current strategy is not adequate to improve productivity. The authors also added that the human capital condition in the country is not supportive to progress national economy. For Malaysia, Goujon and Samir (2006) asserted that human capital is the major challenges to the Malaysian economic development and believes that Malaysia has the "first class infrastructure", but it is still a lack of human capital development.

For Malaysia, to achieve 2020, the development of human capital should be a priority to the government policies. Singapore as an economic role model in South East Asia expected to invest more in education since it regards the empowerment of its citizens through the improvement of the education system.

Countries in both, North and South East Asia, are striving to accumulate human capital and empower their citizens in both, private and public sectors. So, some countries, including Singapore, Taiwan, South Korea and to some extend Malaysia started to invest in the capital that human beings possess and allocate large budget for this purpose. In fact, most of the East Asian countries achieved certain level of development in terms of infrastructure, but they still have problems with human capital accumulation. The education, technology, health care and its facilities are the most elements of human capital development and the concentration of the governments to follow in order to obtain economic performance in terms of individual per capita, firm performance and sustainable economy.

Education and Growth

Educational reform or development in the economic sector is one of the key measurements of economic growth in East Asia. For that reason, some of the governments have regarded education as the chief national strategy to their economic prosperity, particularly in the South East Asian countries, since they are not yet reached to the point of development as North East Asia. This study correlates the growth of the North East Asian economy compared to the South East Asian economy and education.

Education and training experience accelerate productivity and contributes in maximizing individual earnings. At the micro level, Lutz

et al (2004) portrayed that better education supplements better health, greater autonomy and better economic opportunities, without exclusion of certain social groups (Lutz et al, 2004, p. 121-122). Dahal (2010) observed the importance of education associated with the improvement of individual productivity.

Other scholars like Boldrin, Chen and Vang (2001) figured out that education contributes in 5-28 percent of the Taiwan's economic growth, while Tallman and Wang (1994) shows that education investment will accounts of 45 percent of the output growth. So, there is a positive correlation between the GDP growth and the level of education. Tilaki (2002) in the Indian National Institute of educational Planning and Administration showed that education increased the Gross Domestic Product (GDP) by 42 percent in Taiwan from 1965-1989 and this figure is gradually increasing. In South Korea, those who finished primary and middle school earns 1.18 times more than those who accomplished high school diploma; also, the net income of the first year college students is 1.17 times higher than high school graduates, and a college graduate earns almost 1.52 times more than the first year college students. In relies to this finding, it could be argued that education plays a major role in the economic prosperity.

A study by Haldar and Mallik (2007) indicate that educational development also impacts on the measures of productivity improvement and economic growth. The countries that started to reform in their education system are now more developed than the countries that were left behind. South Korea and Japan focused on schools and educational institution to measure their economic well-being, while countries like Thailand and Indonesia were slowly improved their system, literacy and the level of education is not well developed.

In South Korea, Primary study is compulsory and schools are preparing experts and skillful personals to the workforce. For instance, there is a vocational training course in high school on junior colleges. In this program, students spend 2 years of their high school in their class and the remaining years in companies or government institution (Tzannatos, 1997, p. 433). This is a practical and innovative way of education that could be applyed to other countries.

The classical education barely concentrates on practical education. Though, in South Korea, students who finish their school can take responsibility and formulate national economic strategies. Accordingly, we can see that South Korea is now a developed county

and Indonesia has long way to pass through in order to reach that level. Likewise, education in Japan has prepared people to be effective and efficient in their careers and in Indonesia inverse. Although, the pace of development in South East Asia is not as rapid as in North East Asia, human capital becomes a strategic model of their development and they are longing to be developed very soon.

Islam (2010) clarifies the distribution of workforce/employed population by education level in different Asian countries. According to his findings, the South Korean government strategic programs toward human capital shifted over time. For instance, in 1980 the primary school graduates comprised 43 percent of the total workforce, but they are only 26.4 percent in 2000. Simultaneously, his figures demonstrate a swift increase in the upper level or secondary school graduate from 34.0 percent to 53.8 percent. This indication proves how successful is South Korea in engaging qualified people in government bureaucracy.

Basically, the study indicates a positive relationship between education expenditure and growth. For instance, in South Korea and Malaysia, the total education expenditure is 5.1% of the total government spending, while in Indonesia its just 0.8% in Myanmar, 1.2% in Indonesia and 3.8 in Thailand. Consequently, the governments that spend more on education have experienced better advancement and sustainable growth.

The Malaysian government also tried to obtain a certain level of development by introducing programs like Human Resource Development Fund in order to expand and endow manufacturing firms. The contribution to this fund comes from one percent of the employers' salary to improve the technical, financial and human capacity development as the mainstream of economic prosperity. The government also endeavor to develop the quality of education and establish more research universities. Until 2012, there was more than 20 public universities, 400 colleges, industrial institutes, polytechnics and many private universities in Malaysia. The Malaysian government is committed to create a "first class mentality" by nurturing Malaysians with innovation and knowledge economy. The government has realized that education and human capital development is the key to establish a knowledge based economy as an important asset to economic growth (Shaari, 2014). This is clearly highlighted in the country's New Economic Policy (NEP).

Several studies has been conducted on the influence of education on economic growth in Malaysia. Surprisingly, Abdullah (2013) has found a negative relationship between education and economic growth in Malaysia, which is consistent with the findings by Baro & Lee (2010). The author believes that the negative relationship is because education does not support productivity, and its not considered as a factor of production in the short time. However, Latif & Yosuf (2007), Shaari (2014) and Hussein et al (2012) found positive relationship between education and economic growth. Latif & Yosuf (2007) and Hussein et al. concerned about the quality of education. They believe that improving the quality of education helps to increase the primary education of the labor force to fulfill the needs of market economy. In the long run, the authors believed that a high standard of education generates economic growth. For that they suggested for the Malaysian government to spend more money in education investment. Shaari (2014) also pointed out that education investment by the government leads to the national economic growth. It can also generates a better employment opportunities and a greater lifetime earning.

Human Capital and the use of Technology

The use of technology or technological development and human capital are interrelated. This study postulates that economic growth and development are associated with the use of technology. Also, it is believed that the highly technological utilization contributes to sustainable development.

Rosen (1993) and Morand (2005) contended that sustainable economic development is fueled by the advancement of technology. In this regard, to maximize productivity, technology and raw materials are important. This can be better achieve if the government enhances education and the skills of its citizens, encouraging people to be creative and productive.

The use of technology can determine individual productivity. According to Robert (1991), the more we develop in utilizing technology, the more our economy develops. Therefore, technological advancement requires highly skilled individuals to use them. However, without human capital, technology can not be invented; also used. So, technological advancement both requires knowledge to make them, and skills, to use them. Technology nurtures growth and a clear example is Japan, South Korea and Singapore.

Singapore is a small country and does not have any natural resources or enough lands for plantation and agriculture, but its developing rapidly. Not surprisingly, this is mainly associated to human capital development and the use of technology. Besides, though training professional IT personals, it can gather information and use them in developing programs efficiently. So, technology is noteworthy in East Asian Development. South Korea also produces a large share of the world electronic devices and technologies. Taiwan and Hong Kong both are depending on technological development and the skills that they possess in this sector.

Today, human energy is not as important as human knowledge. If before energy and physical ability were important, for now, knowledge is the power and the source of development. Due to the high level of human capital, countries like Japan, South Korea and Singapore are among the top 10 world most developed countries in terms of technological development. More specifically, South Korea now has the highest living standards, Asian 4th and the world 15th largest economy. Dobrzanski (2009) maintains that due to the competitive environment that motivates individual to enrich themselves with knowledge and education to facilitate and invent advanced technology, South Korea experienced the highest economic development in the region (Dobrzanski, 2009, p. 4).

In the Asian Tiger, technology generated innovation which consequently shaped a sustainable economic growth. However, some countries like Thailand has not experienced larger development and innovation due to the lack of technological usages, particularly in the small and medium enterprises (SMEs). Sindakis & Walter (2015), Saigosoom (2013) identified technology as one of the key attribute to innovation and new product development, along with some other HC elements. This has posed a serious intimidation to the survivor of many Thai SMEs in the long term. However, technology and R&D can help to protect these firms in the competitive market economy.

The Vietnamese firms are also facing the hardness of technology usages as in Thailand. The OECD (2013) recognized that the majority of the SMEs in Vietnam are lack of capacity and financial limitation to achieve right technologies and to increase their outcomes. This issue in Vietnam is associated with the unavailability of information, knowledge to use technologies, lack of support from government. Accordingly, less than 15 percent of the private business organizations receive incentives

from government and its different from one sector to another. Textile and chemical industries only spend 3 percent of their turnover on technology innovation and they fill up the gaps through importing from overseas. Despite the lack of innovation and technological advancement in Vietnam, the government has provided some level of support as the initial step to develop this sector. There are almost 600 software development firms in Hanoi and Hi Chi Minh City that employ nearly 15,000 IT professionals. Previously, there was only 170 firms and 5,000 employees (OECD, 2013). The jump towards the use of technology is prosperous and can encourage further growth.

Individual Health Investment
Individual health is a major determinant of the country's productivity and growth. This study assumes that individual health investment can significantly influence on economic growth

Haldar and Mallik (2007) indicate that nutrition and better quality of health increase the productivity of employees because that decrease the incapacity and leaving work due to the sickness and debility. Besides, they assure that better health facilities would lead to longer life expectancy and greater human capital investment, which primarily surges individual income. Arora (2001) also contributes to the same study and highlights the linkage between health and economic development, income and health investment. Cole and Neumayaer (2006) signposts that individuals become weak at the workplace when they are suffering from health issues and illness which is likely to influence their development prospects.

Cole and Neumayer (2006) conducted a study on individual health and its impacts on the total factors of productivity and investment in other sectors like infrastructure, agriculture, education and industry. In their study, they found that individual health is significantly influenced on overall factors of investment. For instance, when someone is sick, this person may have less attendance in school and can not study well; in this case, human capital accumulation would be affected.

Backer provides some literatures about the essence of investment, especially investment in the health of employees. He quoted that education and individual health can together determine the productivity of individuals (Becker, 1998). This could be interpreted in the way that investment individuals make in themselves is much more

essential than the classical form of production, where machines and lands sought to be the most effective way to boost productivity.

On the other hands, Schultz (1961) believes that investment in human health impacts on mortality of the individual and increase both, quantity and quality of the population. It's also true for the companies and private organizations. Hall (2008, p. 20) quoted that "Great companies continually improve the health of the goose, rather than exclusively focusing on the golden eggs" (Hall, 2008, p. 20).

The relationship between human health and growth could be explained well in South East Asia. Due to the better quality of health system and the use of technology, Singapore has the highest rate of life expectancy and the lowest rate of fertility and infant mortality, while Myanmar has the lowest due to poor health system.

According to Chongsuvivatwong et al. (2011), whom collected data from different sources, demonstrates the life expectancy in Singapore is 81 years, Brunei 76, Malaysia and Vietnam 72, Philippines 71, Indonesia 68, Laos 66, Cambodia 61 and Myanmar 56. For the mortality rate in Singapore, out of 1000 live birth in 2010, 2 of them dead, while this number in Malaysia is 5, Brunei 6, Thailand 9, Vietnam 11, Philippines 21, Indonesia 30, Myanmar 42, Laos 49 and Cambodia 50. So, it can be argued that human capital, economic development and health system are all interrelated and affects one another (Chongsuvivatwong et al, 2011, p. 431).

Findings and Conclusion

Human capital is the use of technology, individual health, experience, values, motivation and personal goals that might considered by a business, organization, or within states or national arena, to assess the stands of sustainable economic system. This study provided a clear vision on human capital investment and its elements. The study defined the term of human capital, which is the keen of property and innovation. Recently, human capital becomes the core of the sustainable economic policies in East Asia. Human capital could be utilized as an effective instrument to achieve social, political and economic development.

In fact, knowing the level of development, the first thing to do is to evaluate the stands of the countries in terms of human capital. Human capital is not like physical means of production, but it is the mentality of the individuals who knows how to enhance their skills and how to fulfill their duties in the most effective and efficient way. The findings of this

study indicated that HC is integrated into performance, innovation and productivity. It vested in the return on investment and promoting educational system, providing health care, creating the proper environment for individuals to improve themselves and disclose their capacity. These assumptions have been discussed and the study comes up with a finding that indicates a positive relationship between HC investment for growth, education and growth, promoting individual health and growth.

To achieve objectives of human capital, countries in East Asia provided bulky budget for the purpose of better health care, schooling, learning programs, general and specific training, on job training, risk management skills, and many other areas to sustain innovation. Countries in the North East Asia are more developed due to the advanced technology and better education system, while countries in South East Asia are less developed in terms of human capital accumulation.

The data and theoretical analysis of human capital and economic development in East Asia have shown a positive relationship between human capital investment and growth rate at micro and macro level. Accordingly, governments should bear in mind that waves of development could not be maintained without HC. They need to provide training, health care, education, and encourage their citizens and employees to be innovative, rather than just imitating the previous innovation. Creativity, productivity and innovation are objectives of human capital and drives economic development. Lastly, in the absence of a proper education system and health care, economy and sustainability may suffer as individuals unable to compete with their rivals without accumulating human capital.

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The impact of 4Ps on Purchase Decision: A case of Apple in Hanoi, Vietnam

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Abstract
By using quantitative research methods and deductive reasoning, this research paper aims to address the importance of four marketing mix components (4Ps) on purchase decisions of customers of Apple Inc., by launching a survey in Hanoi, Vietnam, to generate primary data. The chosen sampling technique is quota sampling and several ''quotas'' were built. Descriptive analysis and hypothetical analysis (t-test, one-way ANOVA and Regression) using SPSS 20.0 are applied. Other implications of the research and limitations were also discussed below.
Keywords: marketing mix, purchase decision, Apple Inc., Vietnam, quota sampling.

Introduction

In a competitive and complex marketing environment nowadays, identifying factors influencing purchase decisions of customer is an undeniably important task. The traditional marketing

mix framework has been used by marketers and managers for years, yet no one has ever conducted a research on the impacts of this framework's components on purchase decision. This research paper is written with the intention of explaining the hypothetical impacts of marketing mix elements on purchase decision, taking the case of Apple Inc. in Hanoi, Vietnam as an example.

Research background

Marketing mix, simply put, is a set of marketing variables to be identified and controlled to meet customer demand. The ultimate purpose of meeting customer demand is to influence purchase decisions of target customers. Both these two concepts (*marketing mix* and *purchase decision*) have been receiving much attention from academic community in the recent years. The framework of marketing mix was made known by Borden (1964) and modified by McCarthy (1964), which is widely used in marketing practices, while the concept of purchase decision is a stage of the Buying Decision Process, where the customer decide to buy a specific product (Kotler and Keller, 2011); therefore it is remarkably important. The detail literature review of these two can be found in the next section.

Nowadays, the growing complexity (Ahmed, Hardaker & Carpenter, 1996; Gilmore & Pine, 1997; Doherty & Delener, 2001; Burnes, 2005; Yadav, Swami & Pal, 2006) and increasing competition of the business environment (Azad, Roshan & Hozouri, 2014) brings difficulties to marketers and managers in identifying, applying and controlling their marketing mix strategies. The current situation provokes the researcher to assist marketers and managers to evaluate and to understand the impacts of marketing mix elements on purchase decisions. This could be considered as the major reason for choosing this research topic.

Literature Review
Apple on a global basis

Apple Inc. is an American multinational enterprise, which was established on April 1, 1976 in Cupertino, California by Steve Job, Steve Wozniak and Ronald Wayne and then incorporated on January 3, 1977, without Wayne (Schwartz, 2012). The company specializes in creating and selling personal computers, consumer electronics, online services and computer software.

By 2014, Apple has employed 72,800 permanent full-time employees, owning 437 stores in 15 countries, with the global revenue of US$182 billion (Khan, 2015). Apple is also a popular brand as the second largest information technology company by revenue after Samsung Electronics (Vincent, 2013), and the world's third-largest mobile phone maker by Q3 2014, accounted for 8.4% of the total global market (Rivera & Meulen, 2014). This company is famous for its effective branding strategy, bringing a young, innovative and stylish image to attract customers.

Although the initial prices of Apple products are high, they are usually reduced over time. The company's high sales are because of its aim to higher level of perfection, which delivers the image of high-quality products and services among customers. This company's promotional strategies are also considered as customer-oriented, focusing on promoting new products and services to customers, playing the role of a pioneer in the rapidly growing technological era nowadays. Unquestionably, Apple is one of the world's most successful retailers (Chazin, 2013).

On 4th October 2011, Steve Jobs passed away because of pancreatic cancer, leading to speculation about ability of Apple in creating innovative products without him (Schwartz, 2012). As the marketing environment is becoming more and more complex nowadays, Apple Inc. should reconsider its marketing mix strategies to meet the growing demand in product quality of the mass.

On 30th September 2013, Apple surpassed Coca-Cola to become the most valuable brand of the world in the Omnicom Group's report called - Best Global Brands (Nielson, 2014).

Apple in Vietnam

According to Linh (2014), Vietnam is Apple's hottest market, with its revenue tripled in the first half of 2014. The figure is expected to climb because the majority of Vietnamese consumers are youngsters and they are interested in high technology. The number of Internet and mobile phone users is also rising and the middle class is predicted to double by 2020.

Further, the market is considered as potential, with a highly brand-conscious population. The Apple's products are considered as stylish to Vietnamese people and they are willing to pay to affirm

their social status. Therefore, Apple, the number 1 brand in the world, is efficiently selling its products in this country (Do, 2014).

Marketing mix?

James Culliton was the first person who invented the term in 1948, based on the single price factor of microeconomic theory (Culliton, 1948; Chong, 2003). However, only until 1964 the term marketing mix was popularized by Borden in his article entitled "The concept of marketing mix", as the marketing tool that helps marketer in designing marketing plans. Product planning, pricing, branding, channels of distribution, personal selling, advertising, promotions, packaging, display, servicing, physical handling, fact-finding and analysis are twelve factors of the classical marketing mix of Borden (1964). In the same year, McCarthy defined the marketing mix concept as a set of factors that a manager can use to leverage to fulfill market needs (Dominici, 2009), and refined the idea of marketing mix to a mean to put marketing plan into practice (Bennett, 1997) with four major elements (Product, Price, Place and Promotion).

As defined by McCarthy and Perreault (1987), marketing mix is a combination of variables that an enterprise may control and use to meet the needs of its target market, while Kalyanam and McIntyre (2002) considered marketing mix as a set of micro-elements clustered for simplified management. Tellis (2006) saw marketing mix as a set of variables that marketers could control to affect sales or market share.

Lately, marketing mix was redefined as a set of marketing tools that the organization could tactically control to produce the specific responses in the target market (Kotler & Armstrong, 2012). Since its introduction in 1940s, the marketing mix has been playing the major role of differentiation maker in marketing management (Van Waterschoot, 2000).

Purchase decision?

Much attention has been paid on purchase decision from both academics and practitioners because of its importance not only in predicting operational success, but also in accomplishing   viable competitive advantage (Parasuraman, Zeithaml & Berry, 1985; Zeithaml, 1988; Bolton & Drew, 1991; Dodds, Monroe & Grewal, 1991; Holbrook, 1994; Cronin, Brady & Hult, 2000). Purchase

decision was defined as a uninterupted process, referring to a prudent, persistent action that, after being carried out, brings need satisfaction. This concept may be viewed symbolically in respect of sentimental responses, sensory pleasures, or even reveries and artistic considerations (Engel, Blackwell & Miniard, 1993). From the view of a marketing strategist, establishing purchase decision means meeting the needs of target customers and improving the perceived satisfaction (Porter, 1985). Other past researches on purchase decision have also interpreted not only the multifaceted nature, but also the situation-dependent nature of perceived customer value (Parasuraman et al., 1985; Zeithaml, 1988; Bolton & Drew, 1991; Dodds et al., 1991; Holbrook, 1994; Cronin et al., 2000). As cited by Shareef, Kumar & Kumar (2008), a purchase decision could be adjusted according to each person and/or consumption situation arisen from the quality aspects of sellers. Purchase decision is considered by Engel et al. (1993) as a phenomenon which contains individualistic, circumstantial, communal and perceived environmental facets.

Impacts of Marketing Mix on Purchase decision

Nowadays, companies are being forced to pay more attention to customer satisfaction, as a result of rising competition, by applying marketing strategies and providing customer services in higher levels (Vukasovic, 2010; Manjeshwar, Sternquist & Good, 2013; McCutcheon, Bruwer, & Li, 2013; Azad et al., 2014). Further, as cited by Zhafira, Andreti, Akmal & Kumar (2013), marketing mix framework is one of many tools that help marketers in designing the marketing strategy, having undeniable impact on the customer's decision-making process these days. Many researches have concentrated on explaining the importance of the marketing mix components on purchase decision (e.g. Cash, 1984; Simon, 1989; O'Cass, 2000; Rosa Diaz, 2001; Vanhuele & Dreze, 2002; Kenesei & Tod, 2003; Ahmetoglu, Fried, Dawes, & Furnham, 2010; Muzondo & Mutandwa, 2011; Satit, Tat, Rasli, Chin & Sukati, 2012; Lolo & Irwinda, 2012; Fadhillah, 2013; Neha and Manoj, 2013; Zhafira et al., 2013).

The following hypotheses are suggested:

H1: - The marketing mix of Apple (Vietnam) has impacts on Purchase decision.
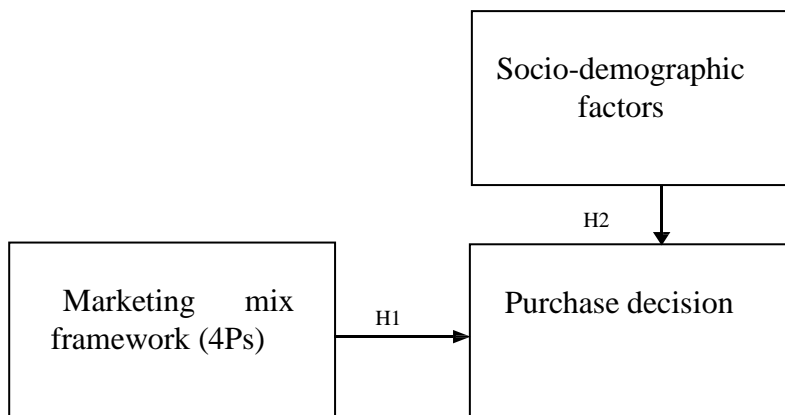
H2a: - There is statistical difference between males and females in Purchase decision.

H2b: - There is statistical difference between single and married respondents in Purchase decision.

H2c: - There is statistical difference among age groups in Purchase decision.

Research methodology
Research framework

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                        ┌─────────────────────┐
                        │  Socio-demographic  │
                        │       factors       │
                        └─────────────────────┘
                                   │ H2
                                   ▼
┌─────────────────────┐       ┌─────────────────────┐
│  Marketing    mix   │  H1   │  Purchase decision  │
│  framework (4Ps)    │──────▶│                     │
└─────────────────────┘       └─────────────────────┘
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Research design

Survey is the chosen research strategy, as this strategy is ubiquitous and usually associated with deductive reasoning and quantitative data (Saunders, Lewis & Thornhill, 2009). This method also allows the collection of a significant amount of quantitative data from a sizeable population at a low cost, which could be analyzed using descriptive and inferential statistics (Saunders et al., 2009). The researcher will ask respondents to answer 46 questions to find the possible reasons for the relationships between variables. The results would be highly representative for the whole population, as the questions will be simplified to be easy to understand and to lower the answering time. Further, the number of responses will be collected as high as possible by using the online survey program named Google Docs to raise the validity of the research. The online questionnaire will be sent to Vietnamese customers through email addresses and Facebook accounts.

Sampling and Measures

The total population is Vietnamese customers of Apple in Hanoi, Vietnam. The sampling frame is not included, as there is not necessary to use a frame for the proposed quota sampling method (Crawford, 1997; Gschwend, 2005). Further, this common method is cheap and convenient, could be administrated easily and less time-consuming (Crawford; 1997; Gschwend, 2005). This sampling method is also suggessted as potentially good for Internet-based research and being used by several researchers (Im & Chee, 2011). Further, as pointed out by Bulmberg, Cooper & Schindler (2011), non-probability techniques are often used because of its advantages in saving cost and time. Many empirical evidences also support the idea that bias of non-probability sampling is negligible (Hill, 2004).

The self-administered questionnaire was conducted between 1st June and 9th July 2015. The questionnaire is well-designed to encourage respondents to fill in and return, whist not appearing too long (Saunders et al., 2009), with only over 1000 words within 5 pages in total. For marketing mix items, the preliminary questionnaire was designed based on the marketing mix model of Kotler and Keller (2011). Purchase decision items were designed based on the ideas of Piron (1993). The questionnaire also contains nine questions related to demographic variables, which are used for analysis using t-test and ANOVA.

As suggested by Dillman (2007), the best way to obtain valid responses is to keep the visual appearance and the wording of the questionnaire simple; therefore, the researcher design the questionnaire using basic features of Microsoft Word 2010, Microsoft Paint and Google Docs. A matrix of questions is used in the questionnaire, as this method helps to reduce apparent length without reducing legibility (Saunders et al., 2009). A similar online questionnaire will be designed, identical with the paper one, to generate responses from samples through their email addresses and Facebook accounts, with the intention of reducing travelling and interviewing time.

The Likert-style rating scale (5 points) is chosen as the scaling technique for the questionnaire, as this type of scaling is popular in almost all fields of academic and business research (Chimi & Russell, 2009). This type of scale provides a useful and simple way to generate data in social sciences (Mellor & Moore, 2014). This type of

scale is chosen because it is personally considered as simple and easy to conducted, allowing respondents to indicate degree of agreement or disagreement with a series of statements (Saunders et al., 2009).

As the purpose of the research is to identify and analyze the impact of marketing mix components on purchase decision of customers in Hanoi, eight major districts of Hanoi were chosen as surveying locations. After distributing a total number of 200 questionnaires over 4 weeks, 175 questionnaires were collected, 18 of which were incomplete. This resulted in a total of 157 usable questionnaires, a response rate of 78.5%. This result is consistent with the minimum standard of at least five times the number of variables, as cited by Myers, Ahn & Jin (2013).

Results and discussion

The descriptive analysis showed that most respondents are from 20 to 40 years old (70.1%), married (68.2%), college/university graduates (60.5%), from Cau Giay Dist., Ba Dinh Dist., Dong Da Dist., Thanh Xuan Dist. and Hoang Mai Dist. (83.5%), work for private companies in service sector or as civil servants, or for state companies (83.5%), work as employees or managers/supervisors (84.7%). These figures indicated that the majority are from the middle-class and upper-class families, having the total income of over 6,000,000 VND/month (90.4%). The questionnaire results also showed that most respondents (85.6%) chose to use iPhone, iPad and Apple services, while only around 14.5% chose to use other Apple products. This point indicated that iPhone, iPad and Apple services also are undeniably popular among Vietnamese customers in Hanoi, while Apple needs to have more effective strategies to attract customers to their other products (iPod, iMac/Macbook and iWatch) (Table no. 1).

Table no. 1. Q46 Frequencies

		Responses	
		N	**Percent**
Used Apple products[a]	iPod	32	9.1%
	iPhone	141	40.1%
	iPad	94	26.7%
	iMac	16	4.5%
	iWatch	3	0.9%
	Services	66	18.8%
Total		352	100.0%

The factor analysis pointed out that the Kaiser-Meyer-Olkin value was 733, and the Bartlett's Test of Sphericity was statistically significant at .000 level (Table no. 2). The results also showed that the alpha coefficients of .777, .734, .729, .790, 554 and 786 belong to Product, Price, Place, Promotion, Predecision Stage and Post Purchase Stage respectively (Table no. 3).

Table no. 2. KMO and Barlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.733
Bartlett's Test of	Approx. Chi-Square	.666
	df	861
	Sig.	.000

The factor analysis pointed out that the Kaiser-Meyer-Olkin value was 733, and the Bartlett's Test of Sphericity was statistically significant at .000 level (Table no. 2). The results also showed that the alpha coefficients of .777, .734, .729, .790, 554 and 786 belong to Product, Price, Place, Promotion, Predecision Stage and Post Purchase Stage respectively (Table no. 3).

Table no. 3. Cronbach's alpha of factors

Measurement scale	Number of items	Cronbach's alpha
Product	7	.777
Price	8	.734
Place	9	.729
Promotion	10	.790
Predecision Stage	4	.554
Post Purchase Stage	4	.786

The Regression analysis revealed that there is enough evidence to conclude that the marketing mix have impacts on purchase decision of customers of Apple in Hanoi (H1 was supported)

Choosing Gender and Marital status as the analytical factors, the applied independent samples *t-* test showed that there is no statistical difference between males and females and between single and married respondents in Purchase decision (H2a, H2b were unsupported).

With Age as the analytical factor, the result of applied one-way ANOVA indicated that there are reliable effects of Age on Purchase decision (H2c was supported). Above 60 years old is the factor having highest mean (M = 3.7188), followed by 20 - 30 years old (M= 3.5660), 30 - 40 years old (M = 3.4890), 50 – 60 years old (M = 3.4250), 40 - 50 years old (M = 3.3947) and below 20 years old (M = 3.2589).

Table no. 4. Result of hypothesis testing

No	Path	Figures	Hypothesis result
H1	MX --> PD	= .097/.091 F/Sig = 16.663/.000**	Supported
H2a	Gender --> PD	Levene Statistic p-value = .141 > α = .05 t = .159, df = 155, p-value = .874 > .05 = α	Unsupported
H2b	Marital Status --> PD	Levene Statistic p-value = .152 > α = .05 t = -.172, df = 155, p-value = .864 > .05 = α	Unsupported
H2c	Age --> PD	Levene Statistic p-value = .045 ≤ α = .05	Supported

*P <.05
**P <.01

Implications, Limitations and Suggestions for future studies

There are several practical implications of the research paper:
(1). The first strength of the research paper is giving a comprehensive view on marketing mix theories and purchase decision concepts and their developments. Readers can depend on this paper as an important source of information for further studies;
(2). Another strength of the research is that a reliable questionnaire is adopted to collect information from the chosen samples. Future researches could use this questionnaire as a dependable framework to generate data;
(3). Finally yet importantly, the step of hypothesis analysis is included in this research, with the benefit of testing the suggested hypotheses to identify discoveries.

On the other hand, the research paper contains several drawbacks: (1) Many ideas in the paper are cited from many secondary sources; however, the validity and reliability of these sources have not been carefully considered. Although the sources are mainly from academic marketing journals, the paper does not concern the issue, which could be a disadvantage; (2) Samples of the research are mostly civil servants, working for state companies or private companies in service sector. (3) Lastly, these days, marketers and managers are facing with many environmental factors in a growingly turbulent and competitive marketing environment. This paper does not contain the explanations of these environmental factors, and thus it could be considered a drawback.

There are several directions suggested by the researcher for future studies: (1) Future studies could apply other statistical methods to generate more exact results (ANCOVA, SEM – Structural Equation Model,...); (2) Further, the designed survey of the research is to generate the feedbacks of Vietnamese customers of Apple in Hanoi only; therefore, there is a need for analysis on differences between feedbacks of experienced and inexperienced participants. A larger-scale survey is also recommended as it will bring more objective results; (3) Other factors such as new components of marketing mix, or cultural, social, personal, psychological factors and perceived risks influencing customer purchase decisions, or economic situation or political environment of the analyzed case should be considered. These factors are undeniably important to the marketing mix strategies and purchasing process of customers; therefore should be carefully analyzed in future studies.

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A Study of Chinese Commercial Banks' Credit Risk Assessment

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Abstract
It has been a long time that Chinese small and medium-sized enterprises (SMEs) have difficulties in dealing with financial problems. As a result of the imperfect financial environment in China, SMEs cannot find the effective way to obtain the funding, especially from Chinese commercial banks. In practice, the existing credit risk assessment and management policies cannot adapt to the requirements of SMEs, which means that developing new mechanisms and management policies is necessary. Based on the previous studies and the economic realities, this paper analyzes the credit status of commercial banks and sorts out the complex background to make a valuable conclusion. In the section of credit risk assessment mechanisms for SMEs, the author compares three classical models and introduces a parameter selection method which measures the financial and non-financial factors together. Besides the theoretical section, a case of Agricultural Bank of China will be studied

and the paper will focus on the credit rating system and explore the innovative service for SMEs.

Keywords: commercial banks, small and medium-sized enterprises, credit risk assessment, credit risk management, Agricultural Bank of China

Introduction

With the deepening of the economic reforms, China's economic structure has changed dramatically. The SMEs are generally becoming an important part of the national economy. In the past, in order to control potential risks, commercial banks tended to invest in large state-owned enterprises which are considered more stabile and SMEs frequently confronted themselves with difficulties in financing. However, with the development of social economy, profits obtained in large enterprises are increasingly decreasing and developing new profit growth opportunities has been the focal point of commercial banks. At the same time, China has introduced financial policies to support SMEs to finance. Therefore, many commercial banks generally focus on the financial demand of SMEs. The main aim of banks is to obtain profit which is in turn determined by the effective operation of banks (Egidijus and Bronius, 2008). Besides considerable profits, SMEs also bring credit default risks, so more effective ways are needed to assess the risk level of the enterprises.

Literature review

Foreign researchers paid attention to the commercial Banks earlier in terms of credit problems of SMEs. Berger and Udell (1998) point out the significance of the centralization of the banking industry for the development of enterprises after researching the financing environment of SMEs. Stein (2002) argues that the scale of the commercial banks have important influence on the credit of SMEs. Those small-scale and decentralized commercial banks are more sensitive to the "soft information" and willing to take risks, providing credit support for SMEs. However, large commercial banks keep relatively conservative attitudes toward SMEs because of higher risks. On the basis of former researches, Berger and Udell (2006) put forward that the "relational credit" is not the only financing theory model for commercial banks. Uchida, Udell and Yamori (2012) propose that the

"soft information", as a reference standard, is difficult to be quantified and collected. Canales and Nanda (2010) further study the bank credit risk and the generation of bad loans caused by information asymmetry, and warn the credit behaviour that ignore the risk. Torre, Peri and Schmukler (2010) put forward a new model of commercial banks financing for SMEs, arguing that banks should promote the development of enterprises, while at the same time increase the profit.

From the perspective of information asymmetry, the study of credit risk mainly focuses on two issues: moral hazard and adverse selection. Arrow (1964) formally introduces the concept of moral hazard in the research of management science. Stiglitz and Weiss (1981) study the problem of adverse selection in credit markets for the first time. Researchers turned to the loan contract since 1980s. Bester (l985) argues that a bad loan contract might be selected by lenders if they conduct favourable policies as incentives for the borrower. Seharfstein, David and Stein (1990) who study the motive forces of enterprises to repay the loan, may think a loan is a bank to terminate the business incentives, inducing it to repay the loan. Elizalde (2003) studies three credit models to research the probability of the default of enterprises. Altman (1969) analyses credit risk of borrowers through quantitative methods. Campbell and Dietrich (1983) examine the influential elements of the risk of mortgage loan through the logit model. Eisenbeis R. A. (1977) studies the relationship between credit risks and financial indicators by the method of econometric analysis. Corvoisier and Grop (2006) point out that the loan interest rate is influenced by multiple factors such as the interest rate on deposits, the extent of market concentration and operating costs. Dietsch (2002) assumes the bank economic capital is given and puts forward a method to measure the risk of loan portfolios. Saunder's and Wilson (1989) analyze the borrower's credit from the perspective of the macro-economic environment. Lack of experts in all sectors is the main problem in credit assessment (Bantiwalu, 2013). Lopze (2015) points out that risk expansion can lead to bankruptcy. The expansion of credit in house market by bank is the main cause of financial crisis (Martin, Ruano & Salas, 2013). The loan officer behaviour can be affected by the personal traits of borrowers (Cole, Kanz & Klapper, 2015). Mauro and Robert (2014) link the assessment criterion to the actual behavior of clients. Data-Mining-based application is introduced by Tello, Eslava and Tobias in 2013, to evaluate the level of credit risk. Mileris (2012)

argues that the ability of commercial banks to manage the credit risk affects banks' stability.

Domestic researchers also put forward different views and strategies from each aspect. Lin and Li (2001) analyze the basic situation and predicament of SMEs and put forward that the only way to solve the problem is to speed up the development of the system of financial institutions. After the 2008 financial crisis, Feng and Zhou (2011) point out that the financial crisis makes the situation more serious for SMEs as commercial banks invest less in SMEs during that time. Deng (2013) compares the financing pattern of Britain, Germany and France and studies the capital source, financing structure and credit time. Yang and Li (2007) put forward "multi-layer and weighted analysis" model to control and improve the credit system of commercial bank. Fu (2009) argues that "risk-oriented audit" has great application prospect. Yang (2009) examines different risk characteristics of SMEs and gives suggestions to improve the financial risk assessment for SMEs. Sun (2010) studies the case of Shanxi province and put forward "the customer-choose strategy" and "risk-prevention strategy". Lin (2011) argues the significance of the route for commercial banks to assess the credit risk. The correlation among the elements should be considered in terms of credit assessment (Li & Zhang, 2014). Fu, Pan and Wang (2014) apply the model of multiple decision trees to improve the level of assessment of the credit risk. Yin, Pu, Liu, Yu and Zhou (2014) point out that the data quality has been an important part in the construction of assessment system of credit risk.

Xue (1995) analyzes the credit risk problem from the perspective of property rights using qualitative analysis. Ran (2002) emphasized the necessity of control of the credit risk through legal means. Liang and Huang (2002) establishes the system of credit risk prevention through the study of the process of commercial banks' risk prevention. Jiang (2003) studies five aspects of commercial banks' risk management, including risk culture, the process, the mode of monitoring, risk measurement and risk transfer. Ke (2003) studies the relationship between advance selection and afterwards inspection in the process of establishing theoretical models. Zhang (2003) points out that the backward of quantitative management is the main problem of Chinese commercial banks' credit management. Jiang (2004) studies the commercial banks' credit from the perspective of the life cycle of enterprises. Zhang (2005) points out the defects of commercial banks'

credit system through the analysis of the internal control. Liu and Xu (2007) study the method for commercial banks to avoid credit risks. Fu (2007) argues that the lack of credit management system is the reason of the poor quality of credit assets. Yan (2008) compares the commercial banks' credit risk and point out that the emergence of the new situation would increase the credit risk of commercial Banks. Xue and Qu (2010) argue that China should alert the threat of the subprime crisis on the economy and strengthen the prevention of credit risk. Liu (2011) points out that the main risk of commercial banks is credit risk.

From the research of Chinese and foreign scholar, risk assessment and control are the core of credit for SMEs and how to control the risk as well as how to widen the channel of the funding for SMEs has become a major concern.

The classical theory of credit risk assessment
### Expert Opinions Method

Expert Options Method refers to the subjective judgment of relevant qualitative and quantitative information by experts on the basis of their own experiences, which finally leads to a rating result (Lou, 2008). Under the Expert Options method, decisions are made by the experts of commercial banks, meaning that the professional skills and subjective judgment are crucial in the decision-making process. The "5C" method, "5P" method and "5W" method are the most common used methods (see Figure no.1). The credit analysis measurement is shown in figure no. 2.

Fig. no. 1. The Expert Options Method
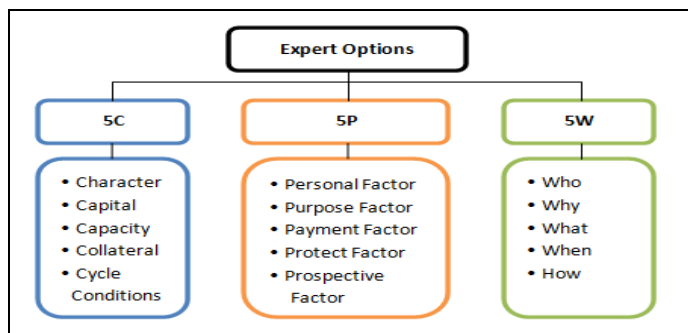
Source: Compiled by the authors

Fig. no. 2. The diagram of Credit analysis measurement
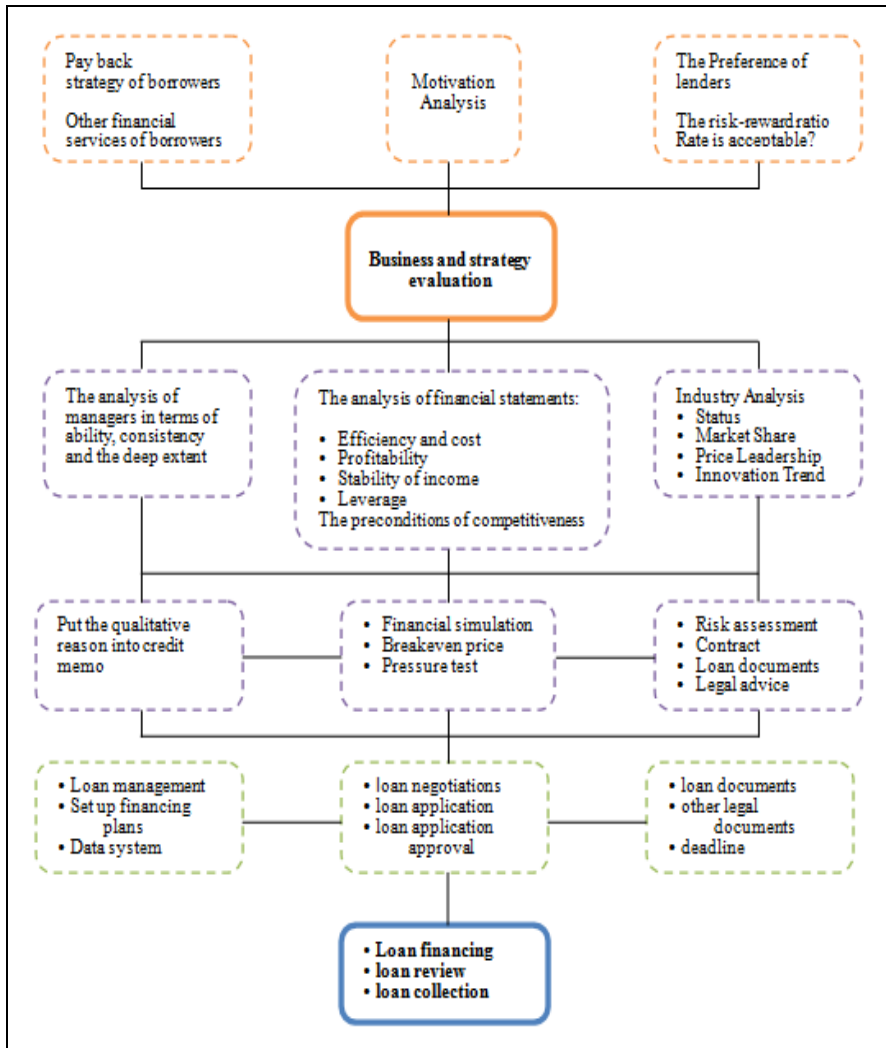
Source: Altman, Haldeman and Narayanan (1977)

Logit Model

The Logit Model belongs to the category of the discriminant function model in Maths. Through the Logit transformation of the variables such as financial index, all values would fall within the effective set, which reduced the requirement of variables, thus is more widely applied. Logit Model is used to predict the possibility of credit

default. The event is divided into two categories: events with low credit risk and high credit risk. The criteria is: If P>0.5, the event is the first-kind event with low credit risk; If P<0.5, the event is the second-kind event with high credit risk. The general form is as follows:

$$P\ (x) = \frac{1}{1 + e^{\lambda}}$$

$$\lambda = b + a_1 x_1 + a_2 x_2 + ... + a_n x_n$$

where: a = the variable coefficient
   P(x) = the probability of the first-kind event

Westgaard (2001) sets up the Logit Model with the indicators of short-term liquidity, asset scale, capital structure and asset return rate and the fitting rate is as high as 92%. With Logit Model for risk prediction, higher accuracy and better fitting could be achieved. However, as various assumptions are required in the regression model and more than 200 samples are needed, the model also has its limited application.

Neural Network Model
Neural network is composed of a large number of neurons, variables would be weighted and processed through equations and finally get the value of risk assessment of enterprises. The simplest simulation unit of neural network is shown in figure no. 3. The computational formula is as follows:

$$P_i = \sum_{j=1}^{n} W_{ji} \cdot X_j - S_i$$

where: P_i = the result of processed information
        X_i = the input variable related to the company
        W_{jt} = the weight of each variable
        S_i = the threshold value that ensure the final results within a certain range

Fig. no. 3. The process of Neural Network Model
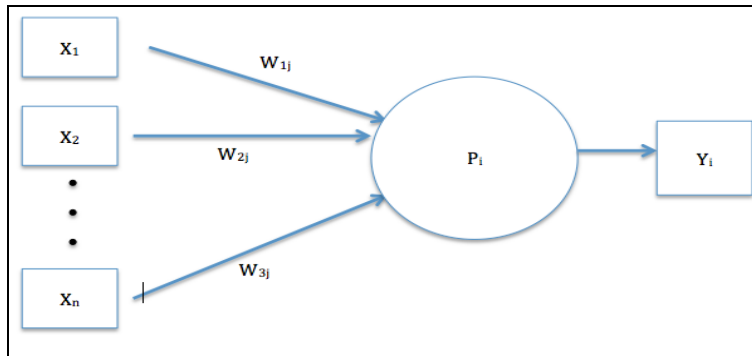
Source: Compiled by the authors

The Neural Network Model can process a large amount of data and has no requirement of the types of data. Especially when dealing with associated data, the neural network model can distinguish the complicated relationship among them and get the results with reference value. However, the computing capacity and efficiency are required to handle a large amount of data and the investment on the maintenance of the equipment would be higher. Moreover, the complex fitting process also impedes wide range of applications in the real life.

Objectives and Methodology

The method of normative analysis is used in this paper to study the credit risk management of state-owned banks from general background to the theoretical analysis. Thacher (2006) argues in support of the normative case study in which investigators use it to advocate specific issues. The object of this paper is to analyze the effective method in terms of credit rating for SMEs.

Moreover, the method of case analysis is also used to research the credit rating model of the Agricultural Bank of China, to analyse the process of credit risk management. The research method of case analysis is suitable for the type of problems with "how" and "why", for the objects which are happening currently and for the researchers who cannot or seldom control the events from happening (Yin, 2004). Stein (1952) argues that case analysis could highlight the crucial issue directly and effectively. Schramm (1971) points out that the core of the case analysis is to show a decision-making process.

It can be found from the case that the credit assessment system of the Agricultural bank of China is relatively reasonable for SMEs. The article combines the theoretical arguments and empirical analysis. On the basis of the credit risk management theory of commercial banks and the actual conditions of the Agricultural Bank of China, the paper analyzes the credit rating system.

Case of the Agricultural Bank of China

The credit rating model of the Agricultural Bank of China would be analyzed in this section. The Agricultural Bank of China is one of four major state-owned banks in China and restructured to limited liability company in 2009. As one of China's leading integrated financial service providers, total assets of it amounted to 14.267738 trillion yuan and the total amount of loans and advances were 6.769873 trillion yuan by 2015. The Agricultural Bank of China is one of the most important and representative commercial banks in our country. This chapter will discuss the existing credit rating models.

The activity of banks is exposed to various risks (Ricards, 2011). The understanding of the risks is significant for bank management and the stability of the economy (Sieczka & Holyst, 2009). Credit risk is the determining factor in lending practices (Daniels & Ramirez, 2008). The major risks of commercial banks are indicated in figure no. 4.

Fig. no. 4. The major risks of commercial banks
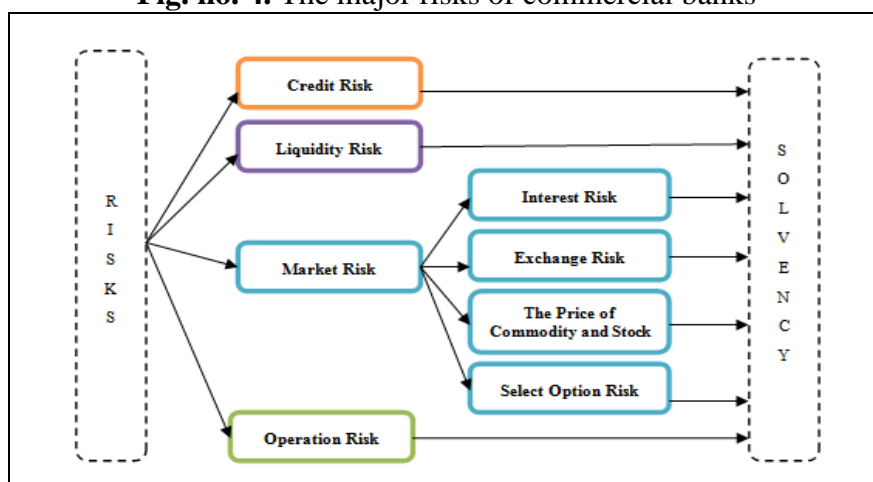
Source: Compiled by the authors

Grunert, Norden and Weber (2005) put forward the significance of a link between the credit rating and probability of default. Credit rating approach is used by the Agricultural Bank of China to measure the credit risk of the enterprises. First-line managers would launch the credit ratings' survey for enterprises with credit demand and then collect information and data according to the requirement of the rating model. After inputting the data into the computer system, the initial results would be created by the rating system IRBS which would be passed on to the bank president and credit management department to audit. Signed by the sub-branch president, the results would be finally obtained after submitted to branches. Figure no. 5 shows the process of the credit rating of the Agricultural Bank of China.

Fig. no. 5. The Process of the Credit Rating of the Agricultural Bank of China
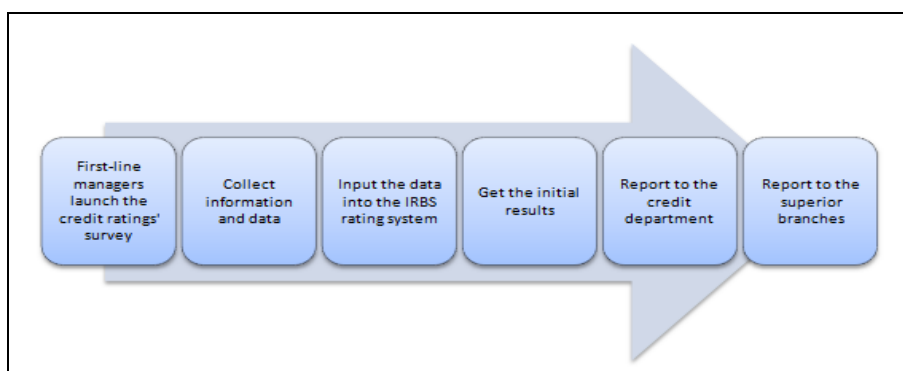
Source: Compiled by the authors

Three rating methods, including the model rating, the pool rating and the expert rating, are currently used by the Agricultural Bank of China. The model rating is the most widely used method among three rating methods. The pool rating method, which is simple and through which the risk can be controlled easier, is specifically launched by the Agricultural bank of China for small and micro enterprises in terms of credit risk assessment.

The model rating is the most widely used method by the Agricultural Bank of China, which firstly assess customers' systemic risk and individual risk, and then analyse the initial result through qualitative and quantitative methods, finally getting conclusions with the aid of

IRBS data analysis system. In terms of the actual operation of the model rating system, classification for enterprises in the industry is the prior thing, because different industries have differing status and development prospect in the economy. All enterprises are divided into 3 categories with totally 19 industry models by the Agricultural Bank of China which set corresponding quantitative and qualitative indexes according to different industries. Detailed classification makes the result more accurate, and improves the effectiveness of the risk assessment. The manager needs to inspect the qualitative and quantitative data of enterprises in different industries. Management level, competition ability, financial risk and credit status are included in qualitative factors. The balance sheet, the income statement, the cash flow statement and other important financial statements of the past three years are required in quantitative analysis. After acquiring the required data, managers input the data into the IRBS system and start the assessment.

IRBS system is the core of the model rating system; the data would be processed by the system. Managers input the data of financial statements to C3 system and choose the rating model to start a rating. IRBS system would analyze the quantitative indicators automatically, while subjective grading is needed in qualitative analysis. Initial assessment results would be generated after those procedures.

Rating points pool is a method assess the credit according to the category and quality of collateral items. Compared to the method of model rating, pool rating is simpler, getting the result directly through the pool rating benchmark table. Table no.1 describes the assessment results of different ways of guarantee and different quality of collateral items. After getting the initial result from the table, managers ought to generate the final result on the basis of comprehensive inspect.

**Table no. 1.** The Benchmark Table of rating points pool

	Guarantee Items and Agencies	Rating Level
Mortgage Guarantee	The right of using state-owned land	A-
	The right of using collective constructive land and the buildings on the land	BBB-
	Residential real estate	AA-
	Commercial real estate	A
	Among them: industrial workshop	BBB
	Buildings under construction	BBB-
Pledge Guarantee	deposit receipt, certificate treasury bonds and bank bill (credit business with low risk)	AAA
Warranty Guarantee	Large and medium-sized corporate customers above AA+	The rating result of the guarantor

Source: Compiled by the authors

Rating point's pool is launched by the Agricultural Bank of China specifically for small and micro enterprises, because some of them cannot provide complete financial information. According to the method of pool rating, commercial banks abandon the complex rating process and only examine the quality of guarantee goods, which opens up a special way of rating. Moreover, on the basis of the collateral quality, the credit risk can be reduced effectively.

Qualitative and quantitative performance of enterprises would be considered by professional workers in the method of expert rating and the final result would generated by grading. Expert rating is divided into two steps ("initial rating" and "rating adjustments"). Figure no. 6 shows the rating indexes, weight and scoring method of the expert rating.

Fig. no. 6. The steps of expert rating
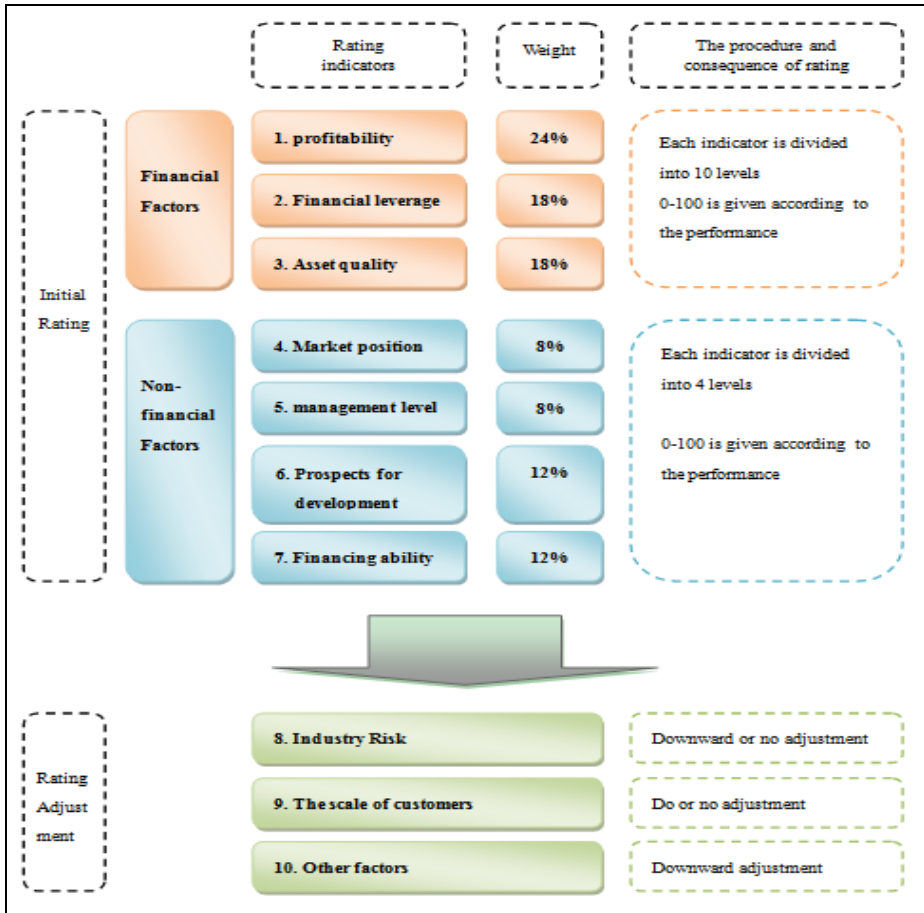
Source: Compiled by the authors

It can be clearly seen from figure no. 6 that both financial and non-financial factors are considered in expert rating, while the financial factors weight more (60%) and non-financial factors account for 40%. Profitability, financial leverage and asset quality are included in financial factors; grades are given according to the performance of the enterprises. Market position, management level, development prospects and financing ability are four main elements considered to be non-financial factors. Multiplying each component score and weighting them together it would get the final scores. Table no. 2 indicates the rating scores and corresponding levels.

Table no. 2. The relationship between the credit level and corresponding scores

Rating	The total result
AAA+	[98,100]
AAA	[96,98)
AAA-	[92,96)
AA+	[88,92)
AA	[84,88)
AA-	[80,84)
A+	[76,80)
A	[72,76)
A-	[68,72)
BBB+	[64,68)
BBB	[60,64)
BBB-	[52,60)
BB	[40,52)
B	[20,40)
C	<20

Source: Compiled by the authors

Conclusions

The credit assessment system of the Agricultural Bank of China is relatively reasonable for SMEs. It can provide enterprises with effective support in terms of credit products and financial services and at the same time control the credit risk as far as possible. The various characteristics of SMEs bring greater potential risks in financing, which means commercial banks as financial service institutions should be able to face the risk effectively.

The Agricultural Bank of China captures the main features of SMEs and sets up methods suitable for SMEs in the process of credit assessment. From the perspective of credit financing, SMEs can get a loan through the model rating system of banks and the Agricultural Bank of China also provides a special rating system for small and micro enterprises, so that these companies can satisfy different financing demands. The method of rating adapts to the various features of large enterprises and SMEs. The credit assessment system for SMEs should be based on the situation and regional environment of commercial banks,

providing SMEs with policies to support them in financing. Qualitative and quantitative analysis should be combined in credit rating rather than only focus on financial data. The balance between financial and non-financial indicators in risk assessment can make the rating results more reasonable for SMEs. The credit assessment is a comprehensive, dynamic and complex process, which requires commercial banks to explore an effective credit strategy for SMEs, at the same time controlling strictly the risk.

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The Consequences of Market Orientation on Business Performance

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Abstract
The present research aims to develop a conceptual model to test the market orientation dimensions: customer orientation, competitor orientation, interfunctional coordination, and their effects on organizational performance. The most common question found in marketing studies refers to the role assigned to the marketing concept to achieve performance. Often, companies are forced to undertake different strategic approaches to be competitive, but few companies manage to become market oriented and meet difficulties in implementing the marketing concept, because the environment in which they operate are extremely dynamic. The present empirical study utilized the results obtained by processing 121 completed questionnaires containing data from large firms that operate in Romanian. The presence of the following market orientation dimensions: customer orientation, competitor orientation and interfunctional coordination, and their consequences on organizational performance were tested using simple linear regression. The results

show that the surveyed firms are market oriented and the positive consequences of this orientation dimensions on performance. The major contribution of the study is that it provides empirical proof of the effect of marketing on firm performance.

Keywords: market orientation, financial performance, customer satisfaction.

Introduction

Market orientation is an issue that has caught the attention of researchers from the moment this theoretical construct was predicated, since it was studied in terms of its effects on performance. Studies have shown a positive relationship between market orientation and firm performance. The theoretical foundation of this relationship was proven first by Narver and Slater (1990, 1994), and then by Kohli and Jaworski (1990). Implementing the concept of market orientation denotes firm's concern to provide customers with constant value (Kara et al., 2005). Narver and Slater's study (1990) was based on the idea that firms must consist of a cultural unity, yet previous research in the field proved this to be superficial.

More recent research (Hooley et al., 2000; Kara et al., 2005; Langerak et al., 2004) in the field of strategic management focused on the development of theoretical concepts and the empirical testing of the relationship between market orientation and performance. This trend was substantiated by conceptualizing and measuring the market orientation construct. At the very beginning, the link between the theoretical definitions and the results of measuring market orientation was a weak one. Along the way, different measurement scales that generated connections between the theoretical and the empirical research were developed. These empirical researches are interesting because of their role in guiding managers in the actions they undertake to transform market orientation in organizational performance.

On the other hand, different studies (Matsuno et al., 2002) shows that market oriented firms strive to meet the latent needs of customers, identify new markets and invest in emerging opportunities. Thus, market orientation is important to firms that have an entrepreneurial

orientation, because it helps them adapt to the environment and react quickly to opportunities and threats.

This paper has the following structure: at first we present a critical review of the existent literature on the dimensions of market orientation and it's consequences on performance, followed by the research hypotheses and the used methodology. Thereafter, we present the hypotheses test results and, at the end, they are findings, limitations, managerial implications and suggestions.

Literature review
Market orientation

Market orientation entails the generation of market intelligence through decision support systems, marketing information systems, marketing research efforts, intelligence dissemination to all departments of the organization and response generation to changes occurring in the firm. Many of the researches conducted to analyze market orientation showed complex and varied results while establishing a relationship between market orientation and performance. However, most of them have underlined a positive link between the two concepts.

Narver and Slater (1990) present market orientation from a cultural perspective. The two assume that creating superior value for customers and the performance of the firm can be obtained through organizational culture. Thus, market orientation is defined by three components: customer orientation, interfunctional coordination and competitor orientation. With these dimensions in mind, the MKTOR measurement scale was created and empirical results of this study demonstrate the existence of a positive influence of market orientation on performance, and also that interfunctional coordination, especially between the research, development and marketing departments, which has a great influence on new product success.

Customer orientation (Desphande, Farley and Webster, 1993) insists that a complete understanding of target customers, as well as goods delivery for them, so that they perceive the goods as having superior value, is sufficient. Because of the fact that this firm's priority is the customer, they are willing and able to identify and analyze the needs and preferences of customers, eventually managing to provide especially good service; however, the downside of customer orientation is that, in some situations, it becomes a barrier to innovation. Customer orientation reflects the firm's ability to understand target specific

customer segment, so that the organization can offer them higher value.

Customer orientation is the extent to which the organization engages in actions designed to increase long-term customer satisfaction. Thus, customer needs should be the priority of all firm's departments; studies on market orientation have shown that this has a beneficial effect on employee performance, since they share a common goal, which is only achievable by developing efficient communication and collaboration.

A firm's ability to be both innovative and market oriented is called into question, because the organization can be held up from innovative actions while being too concentrated on client needs. There is a risk that companies keep too close a relationship with the client and then copy the competitors thus tending to deviate from innovativeness (Narver et al., 2004).

Competitor orientation requires the organization to understand the short term strengths and weaknesses of its competitors, their long-term capabilities and strategies, as well as the entire set of technologies required to meet the current and latent needs of competitors targeted customer segment. Also, the competitor orientation dimension is designed to reflect how the organization understands the capabilities of competitors, both actual and potential.

Interfunctional coordination refers to the coordinated use of an organization's resources to create higher value to its customers. As well as this, it points to the ability to implement the concept that all departments share the same goal: serving the market. Profit orientation represents an efficient and effective implementation of operations and organizational processes. Because there is an opportunity for value creation at every point in the value chain, every person working in the organization can contribute to adding value for the customer. Interfunctional coordination actually illustrates the coordinated use of company resources towards the creation of increased value for customers.

Information processing techniques and the ability to use them are behind the process of market sensing activity. Learning also comes from observation and evaluation of previous decision results, decisions based on the prioritizing of information. Whether the market reacted to it as expected or not, organizational memory played different roles in this process: it was used in the collection of secrets on policies, procedures, routines and rules that can be used, if necessary, in the

creation of a source for answers to following problems and helping the firm take appropriate action.

Market oriented firms are distinguishable by the ability to detect events and market trends ahead of the competition. They can predict with greater accuracy reactions to actions designed to retain or attract customers. They can act on information in real time and in a coherent manner. This capability determines innovative and unique solutions; the distribution of information obtained through synergy, sharing interpretations and provides access to databases containing old firm information (Narver and Slater, 1995).

The consequences of market orientation on business performance

Different antecedents and consequences of the market orientation construct have been identified through numerous studies (Hooley et al., 2000; Kara et al., 2005; Kumar et al., 2000). These identify systems, structures and characteristics that influence performance, specific to market oriented firms.

Among the first researches (Hooley et al., 2000) that show the influence of market orientation on performance are the studies that perform an analysis of the firm present in a transitional economy.

In an emerging economy, managerial perception towards a dynamic environment can influence companies to develop market orientation, as monitoring the external environment enables firms to satisfy customers, track competitors and effectively segment the market in highly dynamic environments; these emerging markets are characterized by the growth of markets, demand and competition.

As well as this results of research performed in the stable market economies show that market orientation provides the organization with a better understanding of customers, competitors and of the environment, which leads to performance. (Kara et al., 2005; Kumar et al., 2002; Langerak, 2003; Santos-Vijande et al., 2005)

Organizational learning is a key factor for market orientation, but is also a consequence of market orientation. In market oriented companies, employees are predisposed to gather, share and review market information. Organizational learning also influences the development of knowledge within the firm. Thus, it can be said that market orientation can be considered a resource capable of generating a higher level of organizational learning, which strengthens the

understanding of the way in which market orientation contributes to the performance of firms, and also learning has a positive effect on the market oriented companies behavior (Vijande-Santos et al., 2005).

Organizational processes required to achieve performance may vary depending on the strategies adopted from firm to firm, therefore it is necessary to analyze each market orientation component, to achieve a positive relationship between strategy and performance. Company management selects those strategies that better apply to the environment in which the firm operates, and market orientation is imperative as it helps with the assimilation ability to react to threats and opportunities created within the environment. (Kumar et al., 2002)

Implementing market orientation has a positive result on positional advantage. The connections analyzed to demonstrate this relationship focused on the three dimensions of market orientation: customer orientation, competitor orientation and interfunctional coordination, as well as on the type of strategy used by the firm, and on the market characteristics. Later research focused on demonstrating that positional advantage will lead to organizational performance (Langerak, 2004).

Also demonstrated in market orientation literature (Kara et al., 2005) is the positive link between market orientation and performance, which is explained by the fact that market orientation provides a better understanding of customers and the environment, which will generate organizational performance. Other arguments used to explain the need to add market orientation to the list of factors that promote performance: market orientation influence on customer orientation, increase of sales, financial performance and organizational profitability.

Kirca (2005) shows that market orientation within an organization entails organizational performance and has positive consequences on the customers, employees and innovativeness. These consequences are: a high level of customer loyalty and satisfaction towards the quality of the firm's products, and will subsequently provide a source of organizational performance. The effects of market orientation on company employees are: stimulating commitment and loyalty to the organization, improving team spirit, a higher level of focus on customer need and increased work place satisfaction.

Research into strategic marketing demonstrates that market orientation generates market sensing capabilities, as well as the capability to establish strong customer relationships within the

organization, which lead to organizational performance. Overall organizational performance is quantified by means of measurements on cost performance, which result in the profit dimensions, and measurements on revenue performance, resulting in the sales dimension or company market share.

One consequence of market orientation on performance is the positional advantage created. This positional advantage represents the relative value delivered by the firm to the target market. This value is obtained from efforts made towards the implementation of marketing and decision making strategies, and from the costs required for this implementation (Morgan, 2012).

Hypothesis

According to the results observed in the seminal researches conducted by Narver & Slater (1990) and Kohli & Jaworski (1990) market orientation has a positive influence on sales, financial performance and profitability.

In contrast to more stable markets, market orientation is required to achieve performance on specific markets where demand has a higher degree of unpredictability. The reason for this is that market oriented firm's pay greater attention to customers and maintains a closer relation to them.

A more intense level of competition creates a greater wider array of choice for customers (Hooley et al., 2000). Market oriented firms will exceed competitor performance level, because of their pursuit of ways to differentiate offers, through the difference in product quality, services offers and pricing policies. Thus, companies will focus more aggressively on the external environment, will develop long term strategic priorities and will identify the changing needs and preferences of customers, to properly respond; this can be successfully implemented only if the firm is market oriented.

Interfunctional coordination is important for company activities that manage customer relationship (Day, 1994), especially for the following activities: scheduling deliveries, planning and joint programming of production, creation of a connected information system, activities that ensure that the firm and its customers correctly understand requirements in order to establish joint commitments to improve quality and increase performance.

Organizations that have developed good interfunctional coordination own integrated strategies and have developed distinctive capabilities through the managing of relationships in a collaborative manner. This task does not only belong to the sales department, but also to the development and support services (Vorhies, Harker and Rao, 1999). Interfunctional coordination and information sharing, necessary for a collaborative customer relation, require an understanding of the strategy and the role of different functions throughout the organization. Based on the arguments presented, we formulated the following hypotheses:

H1: Market orientation dimensions positively influence firm's performance.
H2: Market orientation dimensions positively influences customer satisfaction.
H3: Market orientation dimensions positively influences market effectiveness.
H4: Market orientation dimensions positively influences current firm profitability.

Method
Sample and data gathering
Pertaining to the research method, we can provide the following information: the approach we took is the questionnaire based survey; the data was obtained for processing the current hypotheses from 1800 companies with market operations in Romania; the criteria used to select companies for this database comprised of company size (medium and large companies with over 10 employees) and their area of activity (different fields). The next research stage consisted of generating the database obtained by contacting electronically the top management of 1.800 companies, in order to fill in the online questionnaire. After two weeks since sending the first invitations, we sent an e-mail reminder. Finally, due to the fact that the number of results was unsatisfactory, we approached the sample members telephonically with an invitation to participate in the study. Thus, from the original 1,800 questionnaires distributed, we retained a number of 121 questionnaires.

Measures and measurement models

Measurement of the collected results was performed using scales recognized and validated by previous research. Market orientation was measured using Narver and Slater's scale (1990). To determine the performance of the company we used Vorhies and Morgan's development scale (2005). Measuring scales were accepted because the α Cronbach's value exceeded the level of acceptability for all constructs (above 0.5). Research model hypothesis testing was performed with the linear regression. We present the values of the regression using standardized coefficient β and the level of significance of p for each tested hypothesis. Depending on this level of significance (value less than 0.50), hypotesis were rejected or accepted.

Results

The scales used for this study are at an acceptable level, α Cronbach's being between 0.773 and 0.824 for the market orientation dimensions and 0.816 for firm performance, as in Table no.1.

Table no. 1. Scale properties Cronbach's α at construct and dimension level

Construct and dimensions	Cronbach's α
Customer orientation	.824
Competitor orientation	.792
Interfunctional coordination	.773
Firm performance	.816
Customer satisfaction	.802
Market effectiveness	.725
Current profitability	.686

During this research we tested four regression models to validate the research hypothesis. The first model tests the direct effects of market orientation dimensions on customer orientation, competitor orientation and interfunctional coordination. The second model tests the direct effects of market orientation dimensions on customer satisfaction. The third model tests the direct effects of market orientation dimensions on the firm's market effectiveness. Last model tests the direct effects of market orientation dimensions on current firm's profitability. The results of these tests are shown in Table no. 2 and Table no. 3.

Table no. 2. Results of testing the effect of all market orientation
dimensions on firm's performance

Market orientation	Firm performance	
	β	p
Customer orientation	.542	*.000*
Competitor orientation	.134	.071
Interfunctional coordination	.213	*.007*

Table no. 2 shows that only customer orientation ($\beta=0.542$; $p=0.000$) and interfunctional coordination ($\beta=0.213$; $p=0.007$) have a positive and direct effect on the firm's performance construct, although in some market contexts, competitor orientation can be have the same importance.

Table no. 3. Results of testing the effect of all market orientation
dimensions on customer satisfaction, market effectiveness and current
firm's profitability

Strategic orientation	Customer satisfaction		Market effectiveness		Current profitability	
	β	p	β	p	β	p
Customer orientation	.520	*.000*	.348	*.001*	.529	*.000*
Competitor orientation	.186	*.015*	.236	*.010*	-.080	.401
Interfunctional coordination	.179	*.026*	.185	.054	.184	.068

According to results displayed in Table no. 3, customer satisfaction is influenced by all three market orientation dimensions: customer orientation ($\beta=0.520$; $p=0.000$), competitor orientation ($\beta=0.186$; $p=0.015$) and interfunctional coordination ($\beta=0.179$; $p=0.026$). As far as market effectiveness goes, it is influenced only by two of the market orientation dimensions: customer orientation ($\beta=0.348$; $p=0.001$) and competitor orientation ($\beta=0.236$; $p=0.010$), while current firm profitability is mainly influenced by one of the market orientation directions, namely customer orientation ($\beta=0.529$; $p=0.000$).

Conclusions

During this research we analyzed the influence of market orientation dimensions on firm performance and size. The analysis revealed that the firm's performance is influenced only by customer orientation and interfunctional coordination. By adopting a customer orientation, firms are mainly concerned with identifying and meeting the needs of current and potential customers, concern that is reflected in obtaining a superior marketing performance. Thus, companies should not only specialize on product manufacturing and marketing, but also on new customers, therefore consistently delivering value to customers. This can only be achieved through a coordinated marketing effort, involving all the company's departments in collecting customer information and providing the clients with value.

Although we considered the influence of the competitor orientation dimensions of market orientation on performance as statistically insignificant, we observe that this dimension provides a significant influence on customer satisfaction. This performance dimension is significantly influenced by all the market orientation dimensions, but more by the customer orientation dimension. It goes without saying that a company that understands the needs of customers and is concerned with fulfilling these needs will implicitly increase customer satisfaction levels, as well as keep the customer in the company portfolio. Company knowledge of competitor strengths and weaknesses and designing answers to competitor reactions also contributes to increasing customer satisfaction degree.

The increase of both customer orientation and competitor orientation contribute in generating a higher degree of market effectiveness, exhibited in a market share and sales income increase. Customer orientation should not only refer to the needs, requirements and demands of current customers, but also those of potential ones, whose desiderates are, oftentimes, not articulated; satisfaction of these needs regularly reflect in winning over new customers. Competitor orientation becomes essential on highly competitive markets. Competitor companies can use aggressive price strategies and intense advertising campaigns, and can also launch new products and services, actions that may determine a decrease in the company's sales and its market share, if not correctly monitored.

The analysis performed showed the fact that an increase in firm profitability is only promoted by the customer orientation dimension of market orientation.

Fulfilling the company's financial goals is influenced by the company's ability to understand and meet customer needs, leading to long-term customer retention, with positive effects on financial results.

A market oriented firm must be prepared to create and maintain a competitive edge in any environmental situation, by identifying new market opportunities. For a company to become market oriented, it should be concerned with the acquiring of customers and competitor knowledge and with continuous creation of superior value for customers, which will ultimately reflect in increased marketing performance.

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Negative Social Aspects of Tourism and Sustainable Development: An Empirical Study

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Abstract
This paper deals with the identification of negative social aspects of tourism that hinders the sustainable tourism development and well being, seriously. The identification is exclusively based on the opinion of sample tourist vis-à-vis the opinion of local people. A methodology has been framed to determine the major, minor and other negative social aspects of tourism. Appling statistical technique on respondents' opinion, the author identified five major negative social aspects of West Bengal tourism: growth of unscientific massage parlors, exploitation on tourists, over pricing, commercialization of country's culture/customs and water pollution, which seriously affects the growth of sustainable tourism development. The identified minor negative social aspects are littering, pick pocketing, theft and female prostitution, which also affect tourism. Apart from these, the author identified numerous negative social aspects which affect the industry occasionally, as per capacity. The author suggests that sound 'Security Systems Management Process' at operational level should be implemented by the government to arrest the growth of these negative

aspects so that they can be nipped in the bud. Other wise the motto of 'sustainable development and well being' of studied area will be impeded.

Introduction

Nowadays, tourism becomes one of the major industries of the world. Being the world fastest growing industry, it contributes significantly to employment, income, balance of payments, international peace/harmony and health. Now its position in respect of world is just below the oil and automobile industries. Tourism industry creates sufficient employment opportunity and brings foreign currency. To enhance national income, tourism plays a vital role. National integration and national understanding is maintained by the tourism industry. It plays a vital role in the economic development of a nation, socio-culture and preservation of heritage. Tourism is an extremely labour-intensive industry with high linkage effect. As the world's largest export industry, tourism accounts for about 8% of the total world's largest export, more than 30% of the international trade in services, 10.7% of the global work force and about 12% of the world GDP. According to the world Tourism Organization (WTO), in year 2020 tourism will be an industry earning five billion dollars a day. The economies of the countries like Hong Kong, Singapore, Sri Lanka and small islands like Mauritius, Fiji, Malta, largely depend directly or indirectly on this industry.

India has become one of the popular tourist destinations in the world. The state is the mother of two primitive civilizations of the world. One is the Indus Valley civilization and the other is the Aryan civilization. India with her vast area, with her physical size and appearance, heritage, cultural, splendid natural resources, coastlines, minerals, forest cover, old and antique buildings, the Tajmahal, one of the seven wonders of the world, monuments, beautiful temples and mosques, forts, hill stations, scenic beauty, springs, rivers, Canals, ponds, dams, flora and fauna, gardens, historical places, wild life sanctuaries, can easily find a permanent place in the firmament of the tourism industry. The Government of India recognized tourism as an

industry in the year 1967, establishing a department called "Tourism and Civil Aviation Department". From this year the development of tourism in India is started. The Government of India declared year 1991 as a year of tourism, to give more impetus on tourism development. A report of the ministry of Tourism and Civil Aviation reveals that India's gross foreign exchange earning from tourism was Rs. 283 crores in the year 1997-'98. In this year India received with 19.9% more tourists than the previous year. Share of business still confines to only about one per cent of the world's total tourist trade. In year 1950, the total arrival of tourists in India was 15000. Up to the year 2004 (November), the figure reached in 2.98 million. Now tourism industry is the third largest foreign exchange earner by producing gems and jewellery and ready-made garments in India. Most of the tourists coming to India belong to countries like: UK, USA, Sri Lanka, Germany, France, Japan, Canada, Italy, Malaysia and Singapore.

Tourism industry plays a vital role in generation of employment. Tourism is a labour intensive industry. So, a large number of jobseekers can get employment in this industry. According to a report from the Ministry of Tourism, Government of India, the number of people already employed in industry is more than seven million. The number is about 2.4% of the Indian total labour force. People who directly or indirectly depends on tourism industry in India is around eleven million. Tourism Industry creates employment especially for hoteliers, restaurant-owners, guides, local shopkeepers, merchants etc. The remarkable feature of the industry is that it employs a large number of both educated and uneducated women. Both skilled and unskilled women are employed in this industry. The estimated employment multiplier figure in the tourism industry is 2.36. It means direct employment of 100 persons in tourism industry, which create job for 136 persons in other sectors of our economy. From the viewpoint of employment generation, this multiplier is very attractive than other industry-multiplier. But the industry presently suffers from the problem of "negative social aspects" which causes displeasure to the tourists or dissatisfaction to the host community and thereby hindering the growth of sustainable tourism development, as per their capacity. The present study is intended to identify these negative aspects which impede the sustainable development and well being of the studied area and also suggest some control measures what should be taken to arrest the growth of these negative issues so that they can be nipped in the bud.

Concept of Negative Social Aspects of Tourism

Negative social aspects originate from the negative features of tourism. Tourism is one of the most important growth industries in the world. This industry is looked upon as the most promising one to the developing nations because of its numerous economic benefits. Generation of foreign exchange, creation of income, generation of employment, contribution to state revenue and its associated regional development can be cited as the major economic benefits of tourism. The improvements in the quality of life of the host population and protection and preservation of the natural and built resources including bio diversity are the other visible benefits of tourism development. However, the experience of countries where tourism reached its developments shows that the growth of tourism also leads to the growth of certain negative aspects. Most often, the effects of negative aspects of tourism are felt more disastrous than the negatives of the other industries, especially because of the sensitive nature of tourism industry. Any factor which causes displeasure to the tourists or dissatisfaction to the host community and thereby hindering the growth of tourism is considered as negative social aspect of tourism. It is likely that the various negative features may disturb the growth and existence of the tourism industry. Unless these negative factors are identified and checked in time, it will lead to the retardation of the "sustainable tourism development and will being".

Concept of Tourism and Sustainable Development

In a nutshell, sustainable development is "that which meets the needs of the present without compromising the ability of future generations to meet their own needs". The definition brings out certain important aspects of sustainable tourism:

- Conservation and enhancement of resources for the future generation.
- Protection of biological diversity.
- Equity within and between generations.
- Integration of environmental, social and economic considerations.

The World Tourism Organization (WTO) defined sustainable tourism development as "that which meets the needs of present tourist and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to the management of all resources in

such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential for ecological process, biological diversity and life supporting system". Sustainable tourism in its purest sense is an industry, which attempts to make a low impact on the environment and local culture, while helping to generate income, employment, and the conservation of local ecosystems. It is responsible tourism, which is both, ecologically and culturally sensitive.

Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and continuous process and a meaningful experience to the tourists, raising their awareness amongst them (WTO, 2004).

Literature Review

Few early researches related to tourism industry but not particularly on the present topic are being highlighted in this section.

R. R. Perdue, P. T. Long and L. Allen (1990) tried to test a model of the relationships among rural resident perceptions of tourism impacts, support for additional tourism development, restrictions on tourism development, and support for special tourism taxes. It was found that, when controlling for personal benefits from tourism development, perceptions of its impact were unrelated to socio demographic characteristics and support for additional development was positively or negatively related to the perceived positive or negative impacts of tourism. Support for additional tourism development was also negatively related to the perceived future of the community.

Tourism can bring many economic and social benefits, particularly in rural areas and developing countries, but mass tourism is also associated with negative effects. Tourism can only be sustainable if it is carefully managed so that potential negative effects on the host community and the environment are not permitted to outweigh the financial benefits (Simm, 1998).

The economic benefits of tourism normally outweigh what negative features there may be. But it also acknowledges that the situation is much less clear-cut when considering environmental and socio-cultural issues as opposed to economic ones (Harcombe, 1999).

D. N. Konar (2004) identified that the remarkable feature of the tourism industry is that it employs a large number of both, educated and uneducated women. Both skilled and unskilled women are employed in

this industry. As a labour intensive industry tourism in India has a great potentiality to absorb many unemployed people. He also argued that the development of this industry mainly depends on the countries wide infrastructural development.

Studying about the Critical Success Factors for Tourism Development in Less Developed Countries (LDCs), P. Dieke (2005) experienced that in tourism literature has been written a lot about tourism planning, more is being written about policy, but implementation strategies are often neglected. Perhaps this is symptomatic of the fact that most tourism academics never become practitioners and the gap between theory and practice has yet to be satisfactorily bridged.

Understanding Tourist Destination Growth through a Systems Approach, A. Espinoza (2006) opines that while describing the components of the system such as the Traveler Generating Regions (TGR), the Transit Routes (TR) and the Tourist Destination Regions (TDR) one must analyse them under the influence of diverse environments. Tourism growth in a specific destination cannot be comprehensively understood unless the other regions, TGRs and TRs, as well as the environments influencing in each region are studied.

A. K. Chakrabarty (2006) confirmed in his study that the problem of unemployment in South East Asia may be arrested by developing tourism industry as the employment multiplier of that industry is 2.36.

According to Y. Kumar (2007) sustainable tourism is a new concept, which says that the tourism development should meet the needs of the present without compromising the ability of future generation to meet their needs. Tourism industry is one of the major segments of our economy, it highly contributes to the foreign exchange and generates employment, helping infrastructure development.

T. P. Mammootty and P. T. Raveendran (2008) suggests that in order to achieve the goal of positioning Malabar as an international tourist destination and to achieve the economic objectives, there is a need to formulate a Master Plan for Malabar. In order to realize the economic benefits in a concrete way, the mindset of the society has to be changed so as to create a better atmosphere paving the way for the development of this novel and humane industry for the betterment of Malabar in particular, and the entire State of Kerala and its people in general.

In the last 30 years, community perceptions of negative impacts from tourism have encouraged research from several different fields into community attitudes, with the goal of overcoming opposition to tourism development. Drawing on a study of Charleston, SC, the article of R. Harrill and T. D. Potts (2011) explores the relationships between community attachment, existing through such bonds as friendship and kinship, and resident attitudes toward tourism development. They studied Charleston to understand the differences in attitude toward tourism development among its neighbourhoods, based on community attachment variables, and to explore the role of community attachment in predicting these attitudes, especially regarding residents of historic residential districts. This research has implications for tourism planning in Charleston and other tourism cities with historic residential districts.

M. Mishra and P. K. Padhi (2012) recommends that since tourism is a multi-dimensional activity, and basically a service industry, it would be necessary that all wings of the Central and State governments, private sector and voluntary organizations become active partners in the endeavour to attain sustainable growth in tourism if India is to become a world player in tourist industry.

Umpteenth number of research works have been carried out in recent past on the issues like tourism and economic development, tourism and its environmental impacts, its socio economic and cultural impacts, tourism planning, tourism and rural development, tourism and sustainable development etc. Few studies have been conducted on positive and negative aspects of tourism development. But no research has yet been conducted in a compact way to identify the negative factors of tourism which hinder the growth of tourism development. In the present research work, an attempt has been taken to identity the negative factors of tourism empirically on the basis of tourists' opinion vis-a-vis that of the local people. The work is proposed to be done within the state West Bengal, a context where research on the field is extremely scarce. It is expected that the outcome of the study will have a social significance in the context of sustainable development.

Statement of the Problem

The problem to be studied can be stated as follows: *"Identification of negative social aspects of West Bengal Tourism on the basis of opinion of tourist's vis-à-vis opinion of local people which*

impede the sustainable development and well being of the studied area".

Objective of the Study

The focus of the present study is on identification of negative social aspects of West Bengal tourism and its impact on "sustainable development and well being" of the studied area. On the basis of tourism literature, observation, opinion of knowledgeable persons, informal talks with foreign and domestic tourists, the author primarily identified nine negative social aspects of tourism viz. (a) Growth of unscientific massage parlors, (b) Exploitation on tourists, (c) Over pricing, (d) Commercialization of country's culture/customs, (e) Water pollution, (f) Littering, (g) Pick pocketing, (h) Theft and (i) Female prostitution. At the outset, the author has to prove statistically whether these aspects are really negative of tourism or not. Then the author have to sort out the 'major' and the 'minor' negative social aspects of tourism which have an effect on "sustainable tourism development and well being", on the basis of empirical evidence and statistical technique of analysis. In this context the author also tries to detect the "other negative aspects of tourism", if any, which also affects the industry sporadically as per their capacity. The study also intended to find out the control measures that should be taken to arrest the growth of such negative aspects in the interest of "sustainable development and well being" of the studied area. In this context the author would try to judge the effectiveness of "Security Systems Management Process" to control the negative social aspects.

Hypotheses

In order to realize the objective of the study, the following null hypotheses have been formulated.

H₀: Variance of opinion of tourists and opinion of local people regarding negative social aspects of tourism viz. (a) Growth of unscientific massage parlors, (b) Exploitation on tourists, (c) Over pricing, (d) Commercialization of country's culture/customs, (e) Water pollution, (f) Littering, (g) Pick pocketing, (h) Theft and (i) Female prostitution are not different significantly.

Alternative hypotheses are

H_a: Variance of opinion of tourists and opinion of local people regarding negative social aspects of tourism viz. (a) Growth of unscientific massage parlors, (b) Exploitation on tourists, (c) Over pricing, (d) Commercialization of country's culture/customs, (e) Water pollution, (f) Littering, (g) Pick pocketing, (h) Theft and (i) Female prostitution are different significantly.

Limitation of the Study:

The study has been conducted within the jurisdiction of State West Bengal, India. The present study is based on the opinion of 121 sample tourists and 121 sample local people of the tourist centres of West Bengal. The inference of the study may differ due to change of sample size and composition of sample. So, the findings of the study may not be generalized.

Attributes

The author distinguished nine independent attributes viz. (a) Growth of unscientific massage parlors, (b) Exploitation on tourists, (c) Over pricing, (d) Commercialization of country's culture/customs, (e) Water pollution, (f) Littering, (g) Pick pocketing, (h) Theft and (i) Female prostitution. Only one dependent attribute is "Tourism".

Methodology:

In order to realize the proposed objectives the author developed a research methodology. The technique of selection of sample, selection of tools, collection of data, tabulation, scoring and selection of statistical techniques are being discussed in this phase of the research work. The concept of negative factors of tourism has also been discussed in this stage of the study.

Selection of Sample:

The study has been conducted to identify the negative factors of West Bengal tourism within the jurisdiction of State West Bengal, India. A sample of 121 tourists including 30 foreigners and 60 females has been selected at random out of tourists who visited different tourist centres of West Bengal during the period 2013-2014. Likewise 121 local people including 60 females have been selected at random from

different tourist centres of West Bengal. The Break-up of sample has been exhibited in the Table no. 1 below.

Selection and Description of Tool:

The tool that has been selected to collect the opinion of sample tourists and local people is a structured questionnaire. The details about the tool are discussed below:

Table no. 1. Break Up of Sample

Sexual/Residential Status	Male		Female		Total
	Indian	Foreigner	Indian	Foreigner	
Sample Respondents					
Tourists	40	21	51	09	121
Local People	61	_	60	_	121

A. Questionnaire Details:

Two sets of questionnaire have been prepared to get the separate opinion of tourists and local people regarding the negative factors of tourism that hinders the tourism industry. The questionnaires are structured and close ended. There are nine items in each set, subjects to three options viz. high, moderate and negligible having different scores for each of them. Respondents are requested to give their opinion considering the degree of intensity of each negative factor according to their perceptions. The medium of questionnaire is English and also Bengali, for easy comprehensions and communication.

Collection of Data:

The primary data have been collected directly from 121 tourists and also 121 local people through door-to-door investigation and personal meetings by the investigator himself. Respondents are requested to give their natural, free and frank responses to the queries.

They are taken into confidence and are told that the information is required only for research purpose and will be strictly kept secret.

Tabulation and Scoring:

The data that have been collected through questionnaire are complied on suitable tabulation sheet, which is also prepared for the purpose.

The data obtained from tourists and local people are scored, using the "Likert Scoring System". Score three is allotted to each 'high' response. Score two is allotted to each 'moderate' response and score one is allotted to each 'negligible' response.

Statistical Technique Used

The data are tabulated and analysed keeping in view the objective spelt out and hypotheses formulated. Rank Correlation coefficients (ρ) are calculated to study the degree of relationship between opinion of tourists and opinion of local people regarding the negative aspects of tourism. 'F-test' has been used to study whether the variance of opinion of tourists and also local people regarding the negative aspects of tourism are significantly consistent or not. The test has been made at 1% significance level.

Findings and Analysis

Table no. 2 (Item no. A) shows the variance of opinion of tourists and local people regarding "unscientific massage parlors" are not significantly different as the calculated value of 'F' (i.e. 1.18) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is established that "unscientific massage parlor" is a negative factor of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "unscientific massage parlors" is very high i.e. 0.82 which indicates the factor plays a vital role to hinder the growth of tourism industry. So, it can be identified as a major negative social aspect of West Bengal tourism.

Table no. 2. Results of Statistical Analysis

Attributes	Rank Correlation. Coefficient (ρ)	Calculated Value of 'F'	T.V. of F at 1% sig. Level	Degrees of Freedom	Hypothesis Accepted H_0/ H_a
Tourists' Opinion Vs. Local People Opinion Regarding:					
A. Growth of unscientific massage parlors	.82	1.18	1.53	120/120	H0
B. Exploitation on tourists	.89	1.09	1.53	120/120	H0
C. Over pricing	.79	1.32	1.53	120/120	H0
D. Commercialization of country's culture/customs	.75	1.50	1.53	120/120	H0
E. Water pollution	.69	1.41	1.53	120/120	H0
F. Theft	.33	1.32	1.53	120/120	H0
G. Female prostitution	.29	1.07	1.53	120/120	H0

Table no. 2 (Item no. B) reveals that the variance of opinion of tourists and local people regarding "exploitation on tourists" are consistent as the calculated value of 'F' (i.e. 1.09) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is established that "exploitation on tourists" is a negative social aspect. The degree of relationship (ρ) between opinion of tourists and local people regarding "exploitation on tourists" is very high i.e. 0.89 which implies the factor plays an imperative role to thwart the growth of tourism industry. So it can be identified as a major negative aspect of West Bengal tourism.

Table no. 2 (Item no. C) divulges that the variance of opinion of tourists and local people regarding "over pricing" are unswerving as the calculated value of 'F' (i.e. 1.32) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is established that "over pricing" is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "over pricing" is very high i.e. 0.79 which entails the factor plays a crucial role to spoil the growth of tourism industry. So it can be highlighted as a major negative aspect of the West Bengal tourism.

Table no. 2 (Item no. D) portrays the variance of opinion of tourists and local people regarding "Commercialization of country's culture/customs" are not significantly different as the calculated value of

'F' (i.e. 1.50) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is established that "Commercialization of country's culture/customs" is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "Commercialization of country's culture/customs" is very high i.e. 0.75 which indicates the factor plays a vital role to obstruct the growth of tourism industry. So it can be identified as a major negative aspect of the West Bengal tourism.

Table no. 2 (Item no. E) depicts the variance of opinion of tourists and local people regarding "water pollution" are consistent as the calculated value of 'F' (i.e. 1.41) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is established that "water pollution" is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "water pollution" is very high i.e. 0.69 which indicates the factor plays a key role to impede the growth of tourism industry. So it can be identified as a major negative aspect of West Bengal tourism.

Table no. 2 (Item no. F) displays the variance of opinion of tourists and local people regarding "littering" are not significantly different as the calculated value of 'F' (i.e. 1.19) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is established that "littering" is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "littering" is negligible i.e. 0.27, which indicates the factor plays an unimportant role to hamper the growth of tourism industry. So it can be identified as a minor negative aspect of West Bengal tourism.

Table no. 2 (Item no. G) displays the variance of opinion of tourists and local people regarding "pick pocketing" are not significantly different as the calculated value of 'F' (i.e. 1.11) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is proved that "pick pocketing" is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "pick pocketing" is negligible i.e. 0.38 which indicates the factor plays a trivial role to hamper the growth of tourism industry. So it can be identified as a minor negative aspect of West Bengal tourism.

Table no. 2 (Item no. H) shows the variance of opinion of tourists and local people regarding "theft" are not significantly different as the calculated value of 'F' (i.e. 1.32) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is proved that "theft' is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "theft" is negligible i.e. 0.33 which indicates the factor plays an insignificant role to hamper the growth of tourism industry. So it can be identified as a minor negative aspect of West Bengal tourism.

Table no. 2 (Item no. I) shows the variance of opinion of tourists and local people regarding "female prostitution" are not significantly different as the calculated value of 'F' (i.e. 1.07) is lower than table value of 'F' (i.e. 1.53) at 1% significance level with 120/120 degrees of freedom (i.e. H_0 accepted). So it is proved that "female prostitution" is a negative social aspect of tourism. The degree of relationship (ρ) between opinion of tourists and local people regarding "female prostitution" is negligible i.e. 0.29 which indicates the factor plays a trifling role to slow down the growth of tourism industry. So it can be identified as a minor negative aspect of West Bengal tourism.

Conclusion

The study establishes the hypotheses that variance of opinion of tourists and opinion of local people regarding negative social aspects of tourism viz. (a) Growth of unscientific massage parlors, (b) Exploitation on tourists, (c) Over pricing, (d) Commercialization of country's culture/customs, (e) Water pollution, (f) Littering, (g) Pick pocketing, (h) Theft and (i) Female prostitution are not different significantly. This confirms that the primarily identified negative social aspects of tourism are definitely hindering the growth of tourism industry of West Bengal extremely. On the basis of the degree of relationship of bipolar opinion the "major negative social aspects" of tourism are identified. These are Growth of unscientific massage parlors, exploitation on tourists, over pricing, commercialization of country's culture/customs and water pollution. Other four factors, termed as "minor negative social aspects" of tourism viz. Littering, Pick pocketing, Theft and Female prostitution also affects the industry moderately.

On the basis of informal talk with the tourists and local people, the author identified a number of negative social aspects of tourism such as overcrowding, spread of AIDs and STDs, drug trafficking, male

prostitution, child prostitution, pornography, difficulties in flight services, difficulties in customs clearance, growth of illegal money changer, exploitation of natural resources, alcoholism, increase in land value in tourists centres and off seasonal unemployment which affects the industry sporadically as per their capacity. These aspects are termed as "other negative social aspects" of West Bengal tourism.

Hence the study reveals that there exists a conflicting relationship between the growth of "negative social aspects of tourism" and "sustainable development and well being" of the studied area.

Recommendation

Since tourism industry is the third largest foreign exchange earner by producing gems and jewellery and ready-made garments in India and also the employment multiplier of the industry is 2.36, the government should take necessary steps to check the negative social aspects as far as possible for the sustainable development and smooth growth of the industry. The role of the host community in this regard may not be ignored.

In this context we may suggest government to apply or implement a sound "Security Systems Management Process" at the operational level as discussed below (Figure no. 1):

At the operational management level, the security systems management process in tourism industry can broadly be divided into the planning stage, the organizing stage and controlling stage, as shown diagrammatically in Figure no.1.

The process starts with the assessment of the security risk. After the assessment of the security risk, the level of security required has to be defined. The level of security required depends upon the risk assessment as well as the organizational abilities in the terms of resources etc. to meet the security risks. Then, the security systems objectives are laid, plans are prepared, procedures and methods are established.

After the planning stage, the next step is the setting up of the organizational structure for the security systems. The authority, responsibility and accountability are fixed for each position and the lines of authority and responsibility are fixed. Recruitment and training is also the part of the security organization stage. Nowadays, more and more mechanical devices and electronic gadgets are used for the purpose of security. Such equipments are to be procured and installed. Next step is the security systems integration. Here we try to have an internal integration between the various components of the security

systems e.g. proper integration between the manual security processes and the mechanical/electronic security processes, i.e. proper man-machine mix. Another is the external integration i.e. integration of security systems processes with the other processes operating in the organization itself. This is to be followed by the implementation of the security system. It is the stage where the actual execution takes place.

Figure no. 1. Security Systems Management Process
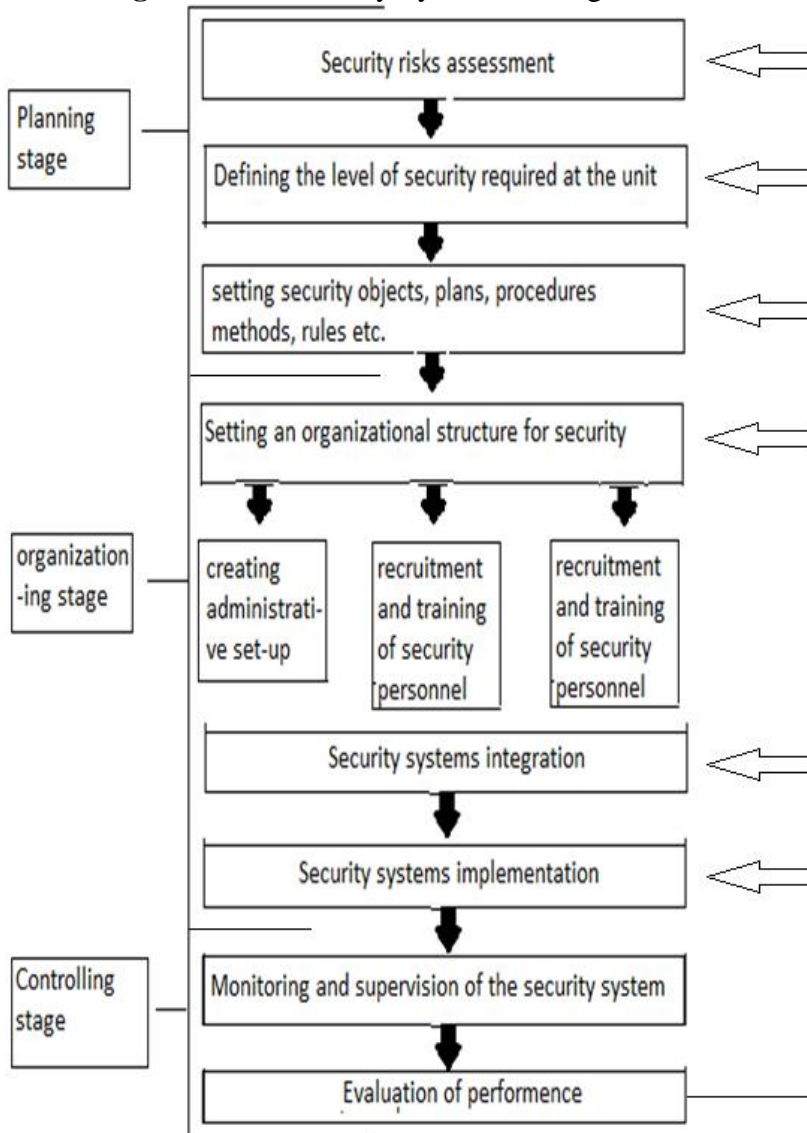
Now, we come to the controlling stage. Here the requirement is that of monitoring and supervising the security system as well as the evaluation of the actual performance of the security system by comparing the results with the objectives. Any deviation has to be analysed and the reasons for deviation have to be found out.

This briefly outlines the conceptual framework of a security system management process which has applications in the tourism industry. It has universal application and can be applied to the Airport Security as well as the security of Hotel or a Resort. Of course, situational, environmental and organizational variables have to be acknowledged in each individual unit case and security system has to be planned, organized and controlled accordingly.

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