African Journal of Marketing Management

Volume 6 Number 5 September 2014

ISSN 2141-2421

Academic Journals

ABOUT AJMM

The African Journal of Marketing Management (AJMM) African Journal of Marketing Management (AJMM) is a peer reviewed open access journal. The journal is published monthly and covers all areas of the subject.

Contact Us

Editorial Office: ajmm@academicjournals.org

Help Desk: helpdesk@academicjournals.org

Website: http://www.academicjournals.org/journal/AJMM

Submit manuscript online http://ms.academicjournals.me/

Dr. Noore Saher
Scholar at Applied Economics Research Centre,
Karachi
Pakistan.

Dr. Ali Khozein
Department of Accounting,
Islamic Azad University,
Aliabad Katoul,
Iran.

Dr. Azhar Kazmi
Department of Management & Marketing,
College of Industrial Management,
King Fahd University of Petroleum & Minerals,
Saudi Arabia.

Dr. Ilhaamie Abdul Ghani Azmi
Department of Syariah and Management,
Academy of Islamic Studies,
Universiti Malaya,
Kuala Lumpur,
Malaysia.

Dr. Adebayo Shittu
University of Agriculture,
Abeokuta,
Nigeria.

Dr. Baba Gnanakumar
Department of Commerce,
Sri Krishna Arts and Science College,
Coimbatore,
India.

Dr. NRV Prabhu
Global Business School,
Chennai,
India.

Dr. R. Ramakrishnan
Academic Karthikeyan Institute of Management Sciences,
Andhra Pradesh,
India.

Dr. Panisa Lanjananda
Marketing Department,
Faculty of Business Administration,
University of Technology,
Thanyaburi,
Thailand.

African Journal of Business Management

Table of Contents: Volume 6 Number 5 September 2014

ARTICLES

Research Paper

Globalization, technology transformation and economic growth (A case study of Pakistan) **56**
Bushra Mushtaq1, Syeda Azra Batool2* and Muhammad Afzal3

Fashion marketing: Strategies in the garment-making micro and small enterprises in Nakuru, Kenya **68**
Lydia N. Kinuthia1*, Keren G. Mburugu2 and MilcahMulu-Mutuku1

academicJournals

Vol. 6(5), pp. 56-67, September, 2014
DOI: 10.5897/AJMM2014.0406
Article Number: F9DBD1247448
ISSN 2141-2421

http://www.academicjournals.org/ AJMM

African Journal of Marketing Management

Full Length Research Paper

Globalization, technology transformation and economic growth (A case study of Pakistan)

Bushra Mushtaq[1], Syeda Azra Batool[2]* and Muhammad Afzal[3]

[1]Department of Economics Virtual University Lahore, Pakistan.
[2]Department of Economics Bahauddin Zakariya University Multan, Pakistan.
[3]University of the Punjab Lahore, Pakistan.

Received 2 April, 2011; Accepted 23 July, 2014

How Economic Growth can be stimulated? This question has called the attention of every policy maker and economist to find the answer. What factors can affect the economic growth? The answer of this question is unclear so far. After the endogenous growth theory as given by Romer (1986, 1990), Lucas (1988) and Grossman and Helpman (1991) Knowledge is being considered as an important and endogenous determinant of Economic growth. The latest knowledge (Technology) is essential for developing countries to catch-up with developed economies. Economic liberalization refers to both trade liberalization and financial liberalization. Trade liberalization means reduction in trade restrictions like tariff, quota or other trade barriers which discourage the international trade. On the other hand, more capital inflow and outflow as a result of Foreign Direct Investment (FDI), portfolio investment or worker remittances show that the country is financially integrating with rest of the world. How the economic liberalization affect the Economy of any particular country. Whether this economic liberalization is good or bad for developing country has become a huge policy debate.

Key words: Technology transmission, Liberalization, R&D Spillovers, Foreign direct investment (FDI).

INTRODUCTION

Almost all developing economies face the scarcity of technology. Technology is very essential to enhance the productivity of factor of production and economic growth. That's why developing countries have low economic growth than developed countries, because the developing countries spend less on research and development while developed countries heavily spend on R & D. Furthermore, high concentration of technology is in the hands of developed counties. According to the Global Competitiveness Report 2011 to 2012, Pakistan ranks at 93 number in term of Availability of latest technology index while India ranks at 47, Turkey 52 and Sri Lanka 63. These figures clearly show Pakistan's weak R&D base as compared to countries of her region. So dependence on foreign source of Technology is very crucial and important for Pakistan. Similarly, World Economic forum which have ranked all the counties to see at what extent business of a country can absorb new technology. According to report (2011 to 12), Pakistan's rank is 92 while India`s rank is 41, Sri Lanka`s 42 and Turkey has ranked at 44. The index which evaluates the capacity of FDI for the transmission of new technology into a country has ranked Pakistan in the rank of 121, India in 38 and Sri Lanka in 45.

*Corresponding author E-mail:azrabatools@yahoo.com Tel: +923006324173

There are many channels through which Technology can be transferred from developed countries. The direct import of Technology embodied machinery and intermediate goods is one channel of transmission of Technology. Foreign direct investment by multinational companies (MNCs) is another source of international Technology transmission. The MNCs import not only Technological modern machinery but also the Ideas and knowledge generated through R & D carried out in parent country. In addition there is movement of employees or managerial talent from developed economies to low and middle income economies when these countries open their economies. Kortum (Many studies have identified the different channels of technology transformation like Eaton 1996) considered licensing agreements as a direct channel of transfer but according to World Investigation Report (2010), the licensing agreement cannot bring the valuable and latest technology.

To absorb the foreign technology brought by foreign investors, the absorption capacity of host country matters a lot. Most studies use an appropriate level of human capital as a measure of absorption capacity[1]. Because, without minimum level of skill or knowledge (absorptive capacity), local firms cannot get knowledge benefit of technology transmission via foreign direct investment (UNCTAD, 2010).[2] To absorb the foreign technology brought by foreign investor, the absorption capacity of host country matters. Most studies use level of human capital as measure of absorption capacity[3]. The negative relationship between foreign direct investment and economic growths indicates the lack of high skilled labor force and basic infrastructure to absorb the foreign technology which comes through foreign direct investment. This lack of capabilities and inefficiencies in technological learning prevent spillover impact of MNC's on economic growth of Pakistan. As without minimum level of skill or knowledge (absorptive capacity) the local firms cannot get knowledge benefit of technology transmission through foreign direct investment (UNCTAD, 2010).[4] Many studies have shown that foreign sources of Technology are important contributor to productivity growth for the developed economies. Less developed economies spend less on R & D and face scarcity of modern Technology. The import of Technology or trans-mission of Technology from developed countries is a key question for their economic growth. There is a lot of controversy regarding the Technology transmission whether it is good or bad for developing countries. Some Economist argues that more open economies have more ability to absorb technology generated in advanced countries. Some economist like Coe and Helpman (1995) showed that transmission of technology and related knowledge from developed counties to developing countries through export and import will be more effective in economies with better and advanced education.

Several economists favor the hypothesis of "learning by exporting". There is a lot of literature which shows that exporters are more productive on average as compared to non-exporters[5]. The question is whether the productivity increases because of "learning by exporting" or productivity leads to more export? Most evidences are in the favor that when any country starts exporting, the firms of that country get benefit from interacting with customer of the world. These customer demand higher quality products and in this way impose condition to produce higher standard products as compared to domestic customer demand. After entering into the foreign markets, firms gain new knowledge and latest technical expertise which facilitate to improve their efficiency level. Other positive contribution of economic liberalization through trade openness to growth can be that liberalization increases specialization and division of the labor thereby improving productivity and export capability. Expansion production of exportable products can lead to production growth by adoption and transmission of modern method of production. Many theorists also are in the view that gains from trade can be in the form that the reduction of trade restriction increase the economic efficiency by making consumers and producers able to buy items at lowest cost. Openness is an important issue but little research has been done on the significance of inter-national Technology transmission for the low and middle income economies like Pakistan.

Trade and investment policies of Pakistan are fairly liberal since the late 80s the average tariff rate come down to just 20% in 2001 to 02 which is only half as compared to the mid-1990s. In the foreign investment policy 1997 Pakistan has opened most sectors of economy to FDI, by giving 100% foreign ownership except some conditionality like the provision of national treatment to foreign companies by following the WTO obligations by giving some incentives such as duty and tax exemptions and some other concessions. Pakistan has taken many steps for inward FDI but is not able to attract large FDI. FDI is very important for Pakistan but it has played a small role in Pakistan economy. In most year of the ratio of FDI to GDP is less than 1%. After independence FDI was very crucial for the success of both import substitution and infant industry.

According to the latest ranking year 2011 given in Table 1, China is the major trade partner of Pakistan by replacing US which remain largest trade partner and now is at third position in the list of top ten trade partners of Pakistan. On the other hand Japan is not in this list. This shows that Pakistan's dependence on American and European markets is declining and trade within the Asia is increasing. In recession of 2008 to 09, Asia has helped to save the world because of huge markets provided by

[1] Nelson and Phelps (1966), Benhabib and Spiegel (1994).
[2] United Nation Conference on Trade and Development, 2010.
[3] Nelson and Phelps (1966), Benhabib and Spiegel (1994).
[4] United Nation Conference on Trade and Development, 2010.
[5] (Bernard and Jensen 1999)

Table 1. latest ranking year 2011.

Countries	Bilateral Trade in the year 2011 (US Dollar)		
	Bilateral Trade	Exports	Imports
China	7.423bn	1.634bn	5.789bn
UAE	7.284bn	1.808bn	5.476bn
USA	5.767bn	3.957bn	1.810bn
Saudi-A	4.975bn	428m	4.547bn
Kuwait	3.425bn	95m	3.330bn
Malaysia	2.626bn	166m	2.460bn
Afghanistan	2.509bn	2.337bn	172m
Germany	2.210bn	1.272bn	938m
India	2.007bn	264m	1.743bn
UK	1.835bn	1.206bn	629m

Source: Basic Data Federal Bureau Statistics, Government of Pakistan

the Chinese and Indian economies. The phenomenal economic growth of India and China has shifted the direction of Pakistan's exports and imports from American and European markets to the Asian markets. After the great recession of 2008 to 09 and global financial crisis, non-western nations had felt the need of minimizing dependence on dollar as a medium of trade. China has signed Local Currency Swap Agreements (LCSA) with 14 countries including Pakistan from 2008 to 2011. After the US and EU sanctions on Iran, there are more currency swaps agreements in Asian countries. Pakistan has signed currency swap agreement with Turkey in November 2011 and with China in December 2011. Currency swap agreement with Iran is in the final stage and this is also expected with Malaysia, Russia and some central Asian states. This would help to boost the trade within the region. These new opportunities have been opened in Asia and Middle Eastern countries for Pakistan to boost economic growth by exporting to these markets and by importing the capital goods from these economies. Business experts believe that Pakistan's top bilateral trade partners are changing because of average better growth in Asia than in Europe and America and economic miracle of China. Chinese investment projects are increasing in Pakistan[6]. At the same time, our imports are increasing from India because Pakistan has given the status of most favored Nation by removing non-tariff barriers. Pakistan's trade with India and China is in deficit. Pakistan has potential to improve its trade relation with Asian countries and can increase export to these economies because of similarities of consumers in tastes and priorities. In the list of top ten largest trade partners of Pakistan, seven are from Asia. Pakistan can import machinery and other technological goods from these economies at low transportation cost as compared to American and European economies.

Pakistan is also one of those countries which allocate very minor amount on R & D and faces scarcity of Technology, so foreign sources of technology are very important for Pakistan. Main focus of this study will be to examine the long-run and short-run impact of Technology (knowledge) transmission on Economic growth of Pakistan by using bounds testing approach to co integration within an Autoregressive Distributed Lag (ARDL)[7] and thereby the importance of several channels of Economic liberalization like the direct import of technological machinery and intermediate goods, export of goods and services and transformation of modern technology, ideas, knowledge and managerial talent from developed economies through MNCs for Economic growth of Pakistan. The outline of this research is as follows. The second section will provide the comprehensive review of the literature. The third section will present the empirical analysis which includes model specification, Econometric specification result discussion and Sensitivity Analysis. The fourth and final section will provide the conclusion and policy recommendation.

OBJECTIVES OF THE STUDY

This research has been conducted for identifying different channels of foreign technology transformation and their impact on economic growth of Pakistan through long-run and short-run empirical investigation. Moreover, we aim to give policy suggestions for the promotion of Technology Transformation and effective use of this technology by developing absorption capacities of Pakistan.

LITERATURE REVIEW

Caves (1974) discovered that there might be two different

[6] "President of the federation of Pakistan Chambers of Commerce and Industry"

[7] Pesaran et al, (2001)

impacts of foreign knowledge spillovers that had competitive effect and technology diffusion effect. The result of this study confirmed that in industry where the proportion of output produced by foreign owned firms was higher, the domestic owned firms had higher value added per worker. This finding supported the view that firms had taken benefit of foreign knowledge or technology and it had increased the efficiency of domestic owned firms. Barro (1991) examined the relationship between exports and economic growth by using the data of Middle East and African countries. The simple ordinary least square regression was used. The results showed that there was positive and significant correlation between exports and economic growth. The major shortcoming of this study was that this had not shown the direction of relationship that is, either relation was from export to growth or from growth to exports. Eaton and Kortum (1996) had shown that international licensing agreements as a direct way to transfer foreign technology but according to world investment report 2000, technology transfer through this source was not important because it did not contain modern technology.

Edwards (1998) checked the relationship between trade liberalization and total factor productivity (TFP) by using indexes of openness. He used the data of 93 developed and developing countries and estimated 18 growth equations by using random effect model. From these estimates he computed TFP and then regressed TFP on income, initial labor and openness indicators. The results indicated that all the coefficient of openness had expected signs and in most of cases it is significant. The coefficient on initial labor force was significant and positive while of initial income it was negative. He concluded that trade openness had positive effect on economic growth. Xu and Wang (2000) examined the impact of Trade and Foreign direct investment as channels for technology transmission from industrialized countries to less developed countries. They also checked impact of this technology on TFP of these countries. The sample of 21 OECD[8] countries for the period from 1971 to 1990 was used. Three channels, capital goods trade, inward FDI and out ward FDI were considered for technology transmission. Ordinary least squares with white's hetero scedasticity consistent covariance estimation method were used to the Cobb-Douglas production function to estimate the required results. The results showed that the technology which comes through the imports of capital goods had a sizeable positive effect on a country's total factor productivity. That was strong empirical support for the trade as channel of foreign technology diffusion. To examine the role of FDI a sample of 13 OECD countries for the period of 1983 to 90 was used. The results showed the outward FDI brings technology back to the home country through the multinational enterprises. There were some short comings in this study. For example Cobb-Douglas production function does not take into account the endogeneity problem in the variable. There was need to develop theoretical justification for methods used and also more attention should be paid to econometric issues. Chakraborty and Basu (2002) examined the causality from GDP to FDI in Indian economy by using co-integration and error-correction models. Results showed that causality run from GDP to FDI rather from FDI to GDP in the Indian economy.

Hoekman et al. (2005) provided the theoretical analysis on Technology Transmission from developed to developing countries. This study has identified four major channels of foreign technology transformation which are trade in products, trade in knowledge or transmission of techniques and methods of production, foreign direct investment and fourth one is movement of people from one country to another. This study argued that Technological goods imported form developed counties are associated with higher total factor productivities (TFP) in developing country so there is recommendation for liberal trade policies. This study has developed certain type of policies recommendation on the basis of this argument as a guide for both home policy makers and also for WTO[9] trade related rules. Husain (2005) analyzed the impact of trade liberalization policy on Economic growth of Pakistan for the period from 1972 to 2002. He used the Johansson Co-integration test to check the long run relationship between trade liberalization and Economic growth of Pakistan. The volume of trade that is, imports plus exports were used as proxy for trade liberalization and other variables are population and investment growth. The stationary of the variables was checked by using ADF[10] test and all the variables were found to be stationary at first difference which gave support to use Johansen Co-integration test to check the long run relationship between trade liberalization and Economic growth. The result showed that trade liberalization has a negative impact on Economic growth in long run, which is 1% increase in trade volume lead to 0.19% decrease in GDP growth of Pakistan. When total trade volume was used separately in total exports and total imports, the positive but insignificant results were found. All this showed that there was no clear cut answers to the question whether trade liberalization positively affect the Economic growth or negatively.

Narayan and Smyth (2005) have examined the impact of trade liberalization on economic growth of Fiji by using Cobb Douglas production function with making little modification in order to take into account the impact of political instability and trade liberalization from 1986 to 2000. A recently developed Autoregressive Distributed Lag (ARDL) bounds testing approach was used to estimate the model. They used taxes on trade as a variable of openness and dummies for political instability.

[8] "Organization for Economic Co-operation and Development"

[9] World Trade Organization

[10] Augmented Dicky-Fuller

Long-run results were consistent to the theory and showed that there is a co integration relationship amongst the exogenous and dependent variable. But the coefficient of labor force was negative. Investment and human capital have positive signs and statistically significant at 10% of level of significance. The dummy variable which was used to capture the impact of political instability of Fiji had negative sign and significant at 1%. This is consistent with the view that political instability has bad impact on economic activities in the country. The exports variable in the long-run have positive sign but insignificant and in the short-run the results are ambiguous. Also the results of tax on trade which measure the degree of trade openness are not clear cut. The weak relationship of exports and investment with GDP is alarming for Fiji. It is necessary for Fiji to raise investment to about 20 to 25% in order to achieve 5% target of GDP growth rate. Driffield and Henry (2007) examined the importance of absorptive capacity and institutional quality of host country for making the foreign technology more effective for the economic growth of host country. The absorptive capacity of foreign technology is measured by the level of human capital which is the average level of schooling for the population of 25 years and above. Institutional quality is measured by two ways. First was measured by index of legal structure and property rights and secondly it was measured through quality of bureaucracy. The threshold regression analysis has been used to get the results for the group of 57 developing countries over the period from 1970 to 1998. The results of this study showed that in the case of trade as a channel of foreign technology the institutional quality is more effective for growth effects, while in the case of FDI a channel of foreign technology, the human capital is found to be more effective for economic growth. This means that in the case of FDI, absorptive capacity of host country matters.

Cuaresma and Scharler (2008) investigated the importance of absorptive capacity of foreign technology in effecting the productivity of the host county. A sample of 21 Organisation for Economic Co-operation and Development (OECD) countries were used from 1973 to 1997. There were assumption that there are two major channels of foreign technology that is, imports of intermediate and capital goods and FDI. Proxies of market regulation and wage bargaining were used to measure the absorption barriers. Foreign R&D stokes were constructed by their import share weighted aver-ages of the country's own R&D stock. The overall results showed that the foreign R&D have positive impact on the economic growth of the countries which have lower levels of market regulation, employment protection and lower barriers to the entrepreneurship. Krammer (2008) examined the impact of international spillovers via trade and FDI on economic growth of 27 transition and 20 western European countries over the period from 1990 to 2006 by using latest technique of panel unit root and co integration test. There were two channels of foreign R&D stocks (i) Foreign R&D stocks embodied in imports (ii) foreign R&D stocks embodied in FDI. Domestic R&D capital stocks and human capital were used as control variable. Domestic R&D capital stock is based on the gross expenditure on R&D and for human capital, the proxy of average years of secondary schooling in male population over 25 year old was used. Human capital measured the absorption capacity of host country. The finding of this study showed that both trade and FDI remains the main carrier of foreign technology both trade and FDI have significant impact on TFP but FDI have smaller impact as compare to trade in the case of both developed and developing countries. The human capital and domestic R&D stocks which were used as absorption capacity and control variable play a crucial role in TFP of these countries. On the basis of these results it can be concluded that openness to both trade and FDI is very crucial and beneficial for developing economies but to use this foreign technology more efficiently there is need of skilled educated labor force and domestic R&D stocks in order to absorb foreign technology.

Chandran and Munusamy (2009) investigated the long run impact of openness on growth of manufacturing sector of Malaysia by using the annual data from 1970 to 2003. The source of data is Malaysia Economic statistics-time series, published by the development of statistics, Malaysia. The data includes the value added output of manufacturing sector, net fixed capital, number of labor and Trade openness. To include the impact of Asian financial crisis 1997 to 1998, the dummy variable was used. To estimate the result the co-integration test was performed using the Autoregressive Distributive Lag (ARDL) method. To check the long run relationship the bond testing approach was used. The results showed that there exist long run relationship among the manufacturing value added output and all the independent variables. But short run results revealed that in the short run openness have no effect on the growth of manufacturing sector of Malaysia. The conclusion of this study showed that any country can only benefit form Economic openness if it uses openness as source of growth on long term basis. In the case of discontinuity in trade policy or opening up of economy for only short time could not encourage the Economic growth of any country. Guessan and Yue (2010) investigated the long-run impact of trade liberalization and foreign direct investment on the Economic growth of Cote d`Ivoire by using the time series data from 1980 to 2007. The variables which were used are output defined by per capita real GDP of Cote d`Ivoire, Foreign direct investment which is also in real form, openness was measured by the total sum of total export and total import as the ratio of GDP, labor measured by total labor force and for capital the proxy of real value of gross fixed capital formation was used. Data of all the variables were taken from world development indicator (WDI, 2008).

Aggregate production function was used in order to check the relationship and this function was estimated by using bounds testing co integration procedure which is ARDL[11] bounds testing approach to investigate the long-run as well as short-run impact of all exogenous variables on the Economic growth of Cote d`Ivoire. Before estimating the model the stationary status was checked by using the unit root test and result showed that all the variables were stationary at first difference. ARDL results showed that there is long-run relationship among the explanatory and dependent variables.

The results of Causality test showed the unidirectional causal relationship exists which is from independent variables to Economic growth. In this case FDI and trade openness have significant and positive impact on Economic growth of Cote d`Ivoire.

This brings the policy recommendation for Cote d`Ivoire that the policy makers should formulate Economic policy in such a way to attract more foreign direct investment along with reducing the trade restrictions in order to achieve higher Economic growth. Brain drain means emigration of a proportion of the population which is comparatively highly educated as relative to average population. Haque and Kim (1995) concluded in their study that emigration causes brain drain which reduces the Economic growth.

Zhu Yiying (2010) tried to investigate how China has become the most attractive place for FDI and how this FDI effect the economy of China by bringing the foreign Technology into China. The author used the theoretical frame work to explain his point of view. As a result of reforms and opening up policy of China, a record FDI have come to China during the last three decades. FDI not only brings Technology to China but also there is establishment of R&D centers by MNCs which help to localize their products to create competitive environment in China`s markets. This market competition brings developing momentum in the host economy. Foreign companies provide advices and professional assistance to the local suppliers which help to accelerate the growth of local enterprises and healthy competition. In this way, FDI acts as source of positive Technology diffusion to host country. Boermans (2010) analyzed that exporting firms are more productive than non-Exporting because of “learning Exporting” by using firm level data of Africa from 1991 to 2003 collected by the survey of World Bank (RPED)[12].

The results showed that African exporting firms are more productive and significantly learning by Exporting as compared to the non-exporting firms. The exporting firms are more active and competitive internationally as compared to domestic firms. Therefore, Government should formulate such policies which help to make domestic firms more active internationally through export promotion programs.

[11] Autoregressive Distributed Lag

[12] “Regional Program on Enterprise Development”

EMPIRICAL ANALYSIS

Model specification and data sources

Many theorists are of the view that technology is key determinant of sustainable economic growth. Creation of new products which expands the knowledge and new ideas is also vital for growth. Alternatively consumers prefer more of the new products and may be willing to pay more for products which are consistent with latest fashion. As the new products come through new ideas, new knowledge, so the international trade can acts as source to transfer these new ideas or knowledge internationally. In Pakistan many studies was done on trade openness and economic growth but no one has investigated the effect of foreign technology on growth which comes from imports of goods. There are many factors which are critical about the effectiveness of foreign technology for the Economic growth of host country. If the traded goods are more R&D intensive then this type of trade will have significant positive impact on economic growth of importing country[13]. As the goods produced by developed country is R&D intensive so opening up of trade by developing country like Pakistan with developed country like Japan or USA will have significant positive impact on economic growth of Pakistan. This impact will also depend on the human capital of developing country. Although the opening up of trade is critical for developing countries but alone trade openness is not enough for Economic growth. The effectiveness of imported technology also depends on the absorptive capability and ability to adopt foreign technology, which further depend on the local circumstances of host country[14]. Absorption of foreign technology is also affected by the distance of host country from the global frontier (Keller 2002). Hejaji and Safarian (1999) summarized theoretical argument for inward FDI and trade as channels for Technology diffusion. FDI is channel to bring the foreign capital, management expertise and production Technology[15]. Howitt (2000) and Mayer Foulkes and Howitt (2000) are of the view that flow of ideas, new method of production and management skill through the movement of peoples across the countries benefit the production growth of especially developing economies. The emigration of people of Pakistan is used as proxy to capture impact of this flow of ideas. Most of the researchers including Ahmed and Anoruo (1999-2000), Edward (1998), Edward (1992), Harrison (1996), Isean (1998), Santos (2002) and Wacziarg (2001) have used total exports and imports as independent variable in their growth models. Many studies like Coe and Helpman, (1995), Keller (2000). Xu and Wang (1999), Mayer (2001), have concluded that

[13] Coe and Helpman (2004)

[14] Evenson and Westphal (1995)

[15] (Johnson, 1972), Blomstrom and Kokko (1997), Aitken and Harrison (1999), Borensztein, De Gregorio and Lee (1998) and Blomstrom and Sjoholm (1999)

import of capital goods is a major channel of foreign technology and source of productivity for developing economies. Some economists like Clerides, Lach and Tybout (1997) are of the views that exporting to industrialized counties is a source of learning or acts as learning by exporting. Chuang (2000), Greenaway and Sapsford (1994) and Dollar (1992) have found that Exports have positive impact on growth.

There is a lot of empirical work done on the issue to examine the impact of liberalization on economic growth of Pakistan but no one examined the relative importance of several channels of transformation of Technology from developed countries to Pakistan as a result of liberalization of economy. So there is need to empirically examine importance of Technology transmission for the Economic growth of Pakistan. Pakistan is also one of those countries which allocate very minor amount on R & D and faces scarcity of Technology, so foreign sources of technology are very important for Pakistan. Main focus of this chapter is to empirically examine the significance of transmission of technology as result of liberalizing economy for economic growth of Pakistan. On the bases of literature and economic theories, the following model will be employed. As shown in Table 2.

$$\ln(Y)_t = f[\ln(K)_t, \ \ln(L)_t, \ \ln(TEXP)_t, \ (MTEC)_t, \ (FDI)_t, \ \ln(EMG)_t]$$

or

$$\ln(Y)_t = \beta_0 + \beta_1 \ln(K)_t + \beta_2 \ln(L)_t + \beta_3 (MTEC)_t + \beta_4 (FDI)_t + \beta_5 \ln(TEXP)_t + \beta_6 \ln(EMG)_t + \mu_t$$

MTEC[16] is technology goods import intensity defined as imports of Technology goods divided by total import[17]. FDI is the foreign direct investment to GDP ratio is used as other channel of Technology diffusion supported by lot of literature. Data of both the variables MTEC and FDI is taken from Economic Survey of Pakistan. The variables $\ln(TEXP)_t$ and $\ln(EMG)_t$ are the natural logarithm of total export and total number of emigrants annually respectively. Both are important indicators of economic liberalization and source of Technology transmission. Data of total exports in million Rupees is taken form Economic Survey of Pakistan and total number of Emigrants annually taken from Bureau of Emigrants and Overseas. Gross Capital formation and employed labor force both are important factor of production which is consistent with the models of Solow (1956), Swan (1956) and Romer (1986 and 1990). Both are used after taking the natural logarithm (lnK, lnL). Data of Gross capital formation (current US$) and Gross domestic products (GDP US$) is taken from world Development Indicator (WDI) and employed labor force taken from International Labor organization (ILO). And at the last μ_t is random error term. The natural logarithm is taken to convert the different variable with different units into percentage. MTEC and FDI are already in percentage so these both variables are used without taking natural logarithm. During the year 1971 to 72 a major change occurred caused by the separation of East wing of Pakistan that's why the data from 1972 to 2009 have been used for estimation purposes.

EMPIRICAL FINDINGS AND RESULT DISCUSSION

Augmented Dickey Fuller (ADF) is applied to check the stationary status and the results are given in table 3. The results of ADF test indicate that every variable either is stationary at level or at first difference. MTEC and ln (EMG) variables both are stationary at level because on the basis of t-statistics the null hypothesis of non-Stationarity is rejected at level. Remaining all variable are stationary at first difference because on the basis of t-statistics the null hypothesis of non-Stationarity is rejected at first difference. It is confirmed that no variable has order of integration two or I (2). So it fulfills the assumption of bounds test that no variable is having I (2). The optimal lag length is one selected by using Schwarz Bayesian and Hannan-Quinn information criterion. The value of F statistics is 3.66 reported in table 4 below. As the calculated F statistics is greater than upper bound at 10% and 5% level of significant, so the null hypothesis of no co-integration is rejected. This Bounds Testing results confirm that there is co integration relationship between dependent and independent variables of the model. Table 5 shows that import of technology goods (MTEC), exports, employed labor force and gross capital formation have positive and statistically significant impact on GDP in the long run.

The coefficient of export reveals that one percent increase in total exports leads to 0.17% increase in GDP growth in the long-run. The positive association between exports and economic growth confirm the export lead growth hypothesis for Pakistan. Export is the important contributor to the economic growth. There are number of benefit of export expansion, like it increases efficiency and improves quality of domestic production. The positive relation between exports and growth is because of the exports sector have positive externalities for non-exporting sector of the country. Expansion production of exportable products can lead to production growth by adoption and transmission of modern method of production. Most of evidences are in the favor that when any country starts exporting, the firms of that country get benefit from interacting with customers from all over the world. These customer demand higher quality products and in this way impose condition to produce higher standard products as compared to domestic customer demand. The coefficient of MTEC reveals that one percent increase in the technology goods import intensity (MTEC) leads to 0.008% increase in GDP growth in the long run. Imports of technological goods (capital,

[16] For detail see Andreas and Marios (2003)

[17] Helpman and Grossman (1991), Wilson and Caselli (2003), and Eaton and Kortum (2001)

Table 2. Data and Variable Description.

Variable	Description	Source
Y	Gross Domestic products (GDP)	WDI[18]
K	Gross Capital Formation	WDI
L	Employed Labor Force	ILO[19]
MTEC	Technology goods import intensity[20]	Economic Survey of Pakistan
TEXP	Total export	Economic Survey of Pakistan
EMG	Number of emigrants	Bureau of Emigrants & Overseas
FDI	Foreign Direct Investment to GDP ratio	Economic Survey of Pakistan

Table 3. Results of Augmented Dickey Fuller (ADF) test.

variables	Test statistics at Level		Test statistics at 1^{st} difference	
	With intercept	With trend and intercept	With intercept	With trend and intercept
(MTEC)	-4.647363***	-4.542410		
ln(TEXP)	-2.681788	-5.510487	-4.738798***	-8.987188
ln(L)	0.122764	-1.633166	-6.614008***	-6.652551
ln(EMG)	-4.064988***	-4.142916		
ln(K)	-1.446830	-2.903182	-4.625059***	-4.525254
FDI	-1.906312	-3.580459	-4.193909***	-4.386527
ln(Y)	-1.299343	-0.677579	-5.125618***	-5.523892

*** shows significance at 1%, 5% and 10% level of significance

Table 4. Wald or F- Statistics for Testing Co-Integration.

Calculated F- statistics	At 10% level of significance		At 5% level of significance	
	Lower bound I(0)	Upper bound I(1)	Lower bound I(0)	Upper bound I(1)
3.66	2.03	3.13	2.32	3.50

Table 5. Estimated Long Run Coefficients using the ARDL Approach.
ARDL (1, 0, 1, 1, 0, 0, 1) selected based on Schwarz Bayesian Criterion.

Dependent variable is ln(Y) 38 observations used for estimation from 1972 to 2009				
Rgressor	Coefficient	Standard Error	T- Ratio	Probability
Constant	7.5033	4.6473	1.6145	[.118]
(MTEC)	.0079331	.0031764	2.4975*	[.019]
ln(TEXP)	.17237	.038716	4.4523*	[.000]
ln(L)	.64507	.31852	2.0252*	[.053]
ln(EMG)	.0015807	.032163	.049145	[.961]
ln(K)	.16849	.067285	2.5042*	[.019]
FDI	-.065644	.026417	-2.4850*	[.019]

*Denote the significance of variable at 10% and 5% of level of significant.

[18] World Development Indicators
[19] International Labor Organization
[20] The Technology goods imports shares is used rather than imports as whole

Table 6. Error Correction Representation for the Selected ARDL Model.
ARDL (1,0,1,1,0,0,1) selected based on Schwarz Bayesian Criterion Dependent variable is dln(Y)38 observations used for estimation from 1972 to 2009.

Regressor	Coefficient	Standard Error	T-Ratio[prob]
C	2.0134	1.6109	1.2499[.221]
dMTEC	.0021287	.8213E-3	2.5918[.015]
dln(TEXP)	.085455	.026154	3.2674[.003]
dln(L)	-.19889	.11654	-1.7066[.098]
dln(EMG)	.4242E-3	.0085583	.049560[.961]
dln(K)	.045213	.023595	1.9162[.065]
dFDI	-.0023993	.0072560	-.33066[.743]
ecm(-1)	-.26834	.072197	-3.7168[.001]
R- Squared = .62306.		Adj R-squared = .48345	
F- stat . F(7 , 30) = 6.3757 , prob(F-stat) = [.000]			
Mean of Dependant Variable = .048924			
S.D of dependant variable = .020883			
DW – statistics = 2.3769			

machinery and parts of machinery) have positive and statistically significant impact on economic growth of Pakistan which indicates that to achieve development and to boost economic growth, it is crucial for Pakistan to import technology goods (capital, machinery and parts of machinery) and input material so that the productive capacity can be expanded. The result also confirms that excessive imports of finished goods (luxury goods) have negative relation with economic growth. This is because the excessive imports of finished (luxury goods) replace the domestic output and thereby the process of value addition in the country. The results are in contrast of the finding of Akbar and Naqvi (2000) who concluded that the imports do not have any role in economic growth of Pakistan but the results of this research show that the imports of technological goods (capital, machinery and parts of machinery) are very crucial for economic growth of Pakistan. The results of this research have also provided the clear cut answer to the study done by Husain (2005), his study could not give the clear cut answer to the question of whether the trade liberalization positively affects the economic growth or negatively.

The two important growth factors (labor and capital) are the most significant and have positive relation with growth which is consistent with the models of Solow (1956), Swan (1956), Kaldor (1961) and Romer (1986 and 1990). The coefficient of employed labor (lnL) shows that one percent increase in employed labor leads to 0.64% increase in GDP growth and co efficient of gross capital formation (lnK) shows that one percent increase in gross capital formation leads to 0.17% increase in GDP growth in the long run. The impact of emigration is not significant although the sign of coefficient of emigration is positive. On the other hand FDI has significant but negative effect on GDP. The coefficient of FDI shows that one percent increase in FDI leads to 0.06% decrease in GDP growth in the long run. The negative relationship between foreign direct investment economic growths indicates the lack of high skilled labor force and basic infrastructure to absorb the technology which comes through foreign direct investment. This lack of capabilities and inefficiencies in technological learning prevent spillover impact of MNC's on economic growth of Pakistan. FDI brings capital intensive techniques in developing economies which are labor abundant and developing countries required time for shifting form labor intensive to capital intensive techniques that is why FDI is not effective in most of developing countries like Pakistan. The results of error correction model in table 5 give information about the short-run speed of adjustment to-wards long-run equilibrium which is 27% per year. This further confirms the short-run movement of the model to-wards long-run equilibrium. As shown in Table 6.

SENSITIVITY ANALYSIS

At the end, the reliability and goodness of fit of the ARDL model is necessary condition before recommending and forecasting any policy on the basis of results obtained. So stability and diagnostic tests are performed. To examine the serial correlation the Lagrange Multiplier (LM) test are used. Heteroscedasticity are checked using test based on the regression of squared residuals on squared fitted values and for normality, the test based on skewness and Kurtosis of residuals are used. On the basis of $\aleph^2$ Statistics or F-Statistics as given in Table 7 we fail to reject the mull hypothesis of

A. No serial correlation
B. No Heteroscedasticity
C. Normality of data.

At the end for examining of stability of coefficients

Table 7. Diagnostic Tests

Test	X^2-statistics	F - statistics
Lagrange Multiplier test to check Serial Correlation	X^2= 2.1756[.140]	F= 1.5790[.220]
Skewness & Kurtosis of Residuals test for normality	X^2 =.42725[.808]	-----
Test to check the Heteroscedasticity based on Regression of Sq. residuals.	X^2 =.76906[.381]	F= .74363[.394]

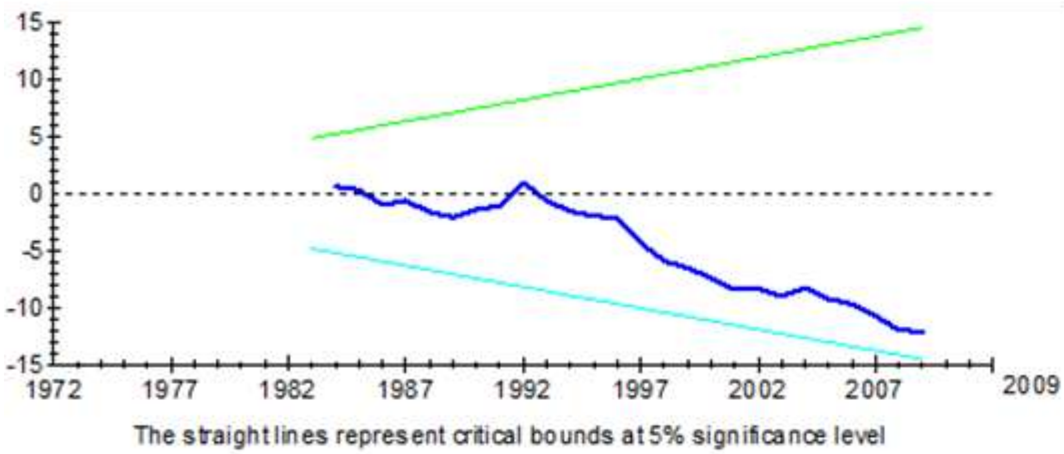

Figure1. Plot of cumulative sum of recursive residuals.

Cumulative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUM square) are used as can be seen from Figure 1 and 2 that the fitted line is within 5% critical bounds so the Null Hypothesis of coefficient cannot be rejected. It means that model is stable.

CONCLUSION AND POLICY RECOMMENDATIONS

On the basis of all the discussion on economic liberalization and estimated results of the model, it can be concluded that openness to both trade and FDI is very crucial and beneficial for Pakistan but to use foreign technology more efficiently, there is need of skilled educated labor force and domestic R&D stocks in order to absorb this technology. To promote the economic growth of Pakistan, there is need to diversify the export base and import duties should be removed from the import of technology goods (capital, machinery and parts of machinery) and input material and at the same time the imports of unnecessary and luxuries should be reduced through heavy import taxes. There are new opportunities THAT have been opened in Asia and Middle Eastern countries for Pakistan, there is need to boost economic growth by exporting to these markets and by importing the capital goods from these economies at low transportation cost. Pakistan leadership must take steps to resolve the energy crisis and improve the law and order situation in order to achieve the macro-economic stability which is vital in boosting economic growth and restoring foreign investor's confidence. Structural reforms that can improve investment climate and competitiveness are necessary to make both foreign direct investment and domestic investment more effective.

There is need of structural transformation through increasing the mobility of capital and labor across sectors and changing their production process in order to enable our firms and entrepreneurs to become globally competitive by diversifying their products. Government can also set up different programs like export investment support fund to transfer public investment to the selected sectors of exportable goods. Acquiring and up gradation of modern technology is necessary for Pakistan in order to move away from low value and traditional export products. This can only be achieved by providing incentives to facilitate technology adoption, acquisition and replacement. Government should formulate and implement such policies which can enhance the adaptive and absorptive capacities of economy for maximization of technology dissemination. Creation of skilled labor force not only for MNCs, but also for local firms is crucial in order to promote competitive domestic enterprises. Education policies should be changed as the demand for labor force change from industry. Along with the policies to enhance the absorptive and adoptive capacities of the economy, Government needs to target specific technologies related to the development areas. By providing fiscal or finance

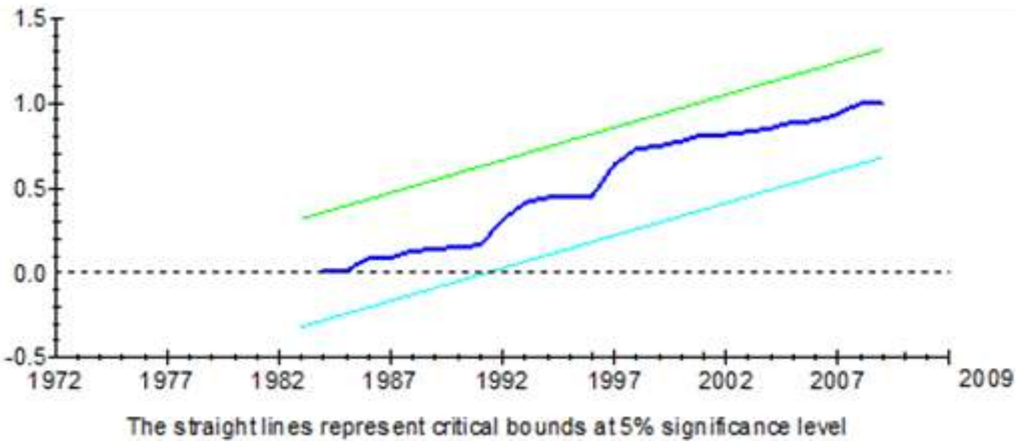

Figure 2. Plot of cumulative sum of recursive residuals.

incentives, Governmentcan attract these specific technologies into Pakistan. Establishment of Universities, Science and technology parks and other research institutions can generate environment for R & D innovation and THIS can help to attract high technology investors relevant to priority areas of development strategies. The impact of foreign research and development capital stock and domestic R&D capital stock on economic growth of Pakistan should be incorporated in the suggested model. Due to the unavailability of data, these variables have been left in this model. But future study should take into account these variables; because these are significant factors for the evaluation of impact of foreign technology and knowledge on economic growth of Pakistan.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

Ahmed Y, Anoruo E (1999-2000). "Openness and Economic Growth: Evidence from Selected ASEANCountries". Indian Econ. J. 47(3):110-117.

Akbar M, Naqvi ZF (2000). Export Diversification and the Structural Dynamics in the Growth Process: The Case of Pakistan. Pak. Dev. Rev. 39(4):573–589. http://www.pide.org.pk/pdf/PDR/2000/Volume4/573-589.pdf

Caves RE (1974). "Multinational Firms, Competition, and Productivity in Host-Country Markets," Economica 41:176-193.

Chandran VGR, Munusamy (2009). "Trade Openness and Manufacturing Growth in Malaysia" J. Policy Model. 31:637-47. http://www.sciencedirect.com/science/article/pii/S0161893809000489

Coe D, Helpman E (1995). 'International R&D spillovers', Eur. Econ. Rev. 39:859-887.

Coe DT, Helpman E (1995). "International R&D Spillovers", Eur. Econ. Rev. 9(5):859-887.

Driffield N, Henry M (2007). Trade, FDI and Technology Diffusion in Developing Countries: The Role of Human Capital and Institutions. Economics and Strategy Group Aston Business School Aston University Birmingham B4 7ET UK. https://sta.uwi.edu/conferences/salises/documents/Henry%20M%201.pdf

Eaton J, Kortum SJ (1996). Trade in ideas: Patenting and productivity in the OECD. J. Int. Econ. 40(3–4):251–278.

Edwards S (1992). Trade orientation, distortions and growth in developing countries. J. Dev. Econ. 39:31-57.

Edwards S (1998). "Openness, productivity and growth, what do we really know?" Econ. J. 108:383-398.

Haque NU, Kim S-J (1995). "Human capital flight," impact of migration on income and economic growth, IMF staff papers 42(3):577-607. http://www.jstor.org/discover/10.2307/3867533?uid=2&uid=4&sid=21104171351671

Harrison A (1996). Openness and growth, a time series, cross-country analysis for developing countries. J. Dev. Econ. 48:419– 447.

Hoekman B, Maskus K, Saggi K (2005) Transfer of technology to developing countries: unilateral and multilateral policy options. World Dev. 33(10):1587-1602.

Husain I (2005). Economy of Pakistan: An Overview, Key Note Address at the Expo: 2005, Conference held at Karachi on February 3, 2005.

Iscan T (1998). "Trade Liberalization and Productivity: A Panel Study of the Mexican Manufacturing Industry". J. Dev. Stud. 34(5):123-148.

Kaldor N (1961) "Capital Accumulation and Economic Growth," In: F.A. Lutz and D.C. Hague, eds., The Theory of Capital, St. Martins Press pp.177-222.

Keller W (2000). 'Do Trade Patterns and Technology Flows Affect Productivity Growth?' World Bank Econ. Rev. 14(1):17-47.

Mayer J (2001) 'Technology Diffusion, Human Capital and Economic Growth in Developing Countries', UNCTAD Discussion Paper #154, UNCTAD Geneva.

Narayan P, Smyth R (2005). Trade Liberalization and Economic Growth in Fiji. An Empirical Assessment Using the ARDL Approach, J. Asia Pacific Econ. 10(1):96-115, DOI: 10.1080/1354786042000309099

Pesaran MH, Shin Y, Smith RJ (2001). "Bounds testing approaches to the analysis of Level relationships," 16:289-326. http://onlinelibrary.wiley.com/doi/10.1002/jae.616/abstract

Romer PM (1986). "Increasing Returns and long-run growth", J. Polit. Econ. 94(5):1002-1037. http://ihome.ust.hk/~dxie/OnlineMacro/romerjpe1986.pdf

Romer PM (1990). "Endogenous technological change", J. Political Econ. 98(5):S71-S102. http://vision.ece.ucsb.edu/~kleban/papers/Romer.pdf

Santos P (2002). "Trade Liberalization and Export Performance in Selected Developing Countries" J. Dev. Stud. 39(1):140-164. http://ideas.repec.org/p/ukc/ukcedp/0012.html

Solow RM (1956). "A Contribution to the Theory of Economic Growth," Q. J. Econ. 70(1):65–94.

Solow RM (1956). "A Contribution to the Theory of Economic Growth," Q. J. Econ. 70(1):65–94.

UNCTAD (2010). Foreign direct investment, the transfer and diffusion of technology, and sustainable development. http://unctad.org/en/docs/ciiem2d2_en.pdf

Wacziarg R (2001) “Measuring the Dynamic Gains from Trade” World Bank Econ. Rev. 15(3).

Xu B, Wang J (1999) ‘Capital Goods Trade and R&D Spillovers in the OECD’, Can. J. Econ. 32(5):1258-1274.

Xu B, Wang J (2000), “Trade, FDI and International Technology diffusion”, Canadian J. Econ. http://www.ceibs.edu/faculty/xubin/Xw.pdf

Zhu Y (2010). An Analysis on Technology Spillover Effect of Foreign Direct Investment and Its Countermeasures. Int. J. Bus. Manage. 5(4):178-182. http://connection.ebscohost.com/c/articles/49173905/analysis-technology-spillover-effect-foreign-direct-investment-countermeasures

academicJournals

Vol. 6(5), pp. 68-74, September, 2014
DOI: 10.5897/AJMM2014.0397
Article Number: 67DC68E47452
ISSN 2141-2421

http://www.academicjournals.org/ AJMM

African Journal of Marketing Management

Full Length Research Paper

Fashion marketing: Strategies in the garment-making micro and small enterprises in Nakuru, Kenya

Lydia N. Kinuthia[1*], Keren G. Mburugu[2] and MilcahMulu-Mutuku[1]

[1]Egerton University, P.O Box 536-20115, Egerton, Kenya.
[2]Kenyatta University, P.O Box 43844-00100, Nairobi, Kenya.

Received 25 January, 2014; Accepted 14 August, 2014

Fashion is very dynamic and way of life for humans in many consumer products, clothing included. In Kenya, the clothing industry is characterized by a dynamic environment and intense competition caused mainly by enlarged globalization, trade liberalization and importation of second-hand (*mitumba*) clothes. In this kind of environment, it is becoming increasingly difficult for an enterprise to maintain long-term success. Thus, the clothing enterprises are faced with challenges that demand them to offer higher value added products that meet the demands of the customers. As a solution, sound marketing strategies are critical to the survival and growth of micro-enterprises in the garment making sector. However, there is limited research that has looked at the enterprises from a marketing strategy perspective in terms of the type of marketing strategies that are embraced. This paper aims at highlighting the various marketing strategies. The study used ex-post facto research design targeting garment-making micro-enterprises with less than ten employees in Nakuru town. The main data collection instrument was a questionnaire that comprised closed and open-ended questions. Principal component analysis and Chi-square goodness-of-fit test (x^2) were used to determine the various marketing strategies and test the hypothesis that there was no variation in the marketing strategies implemented by garment-making micro-enterprises. Eight strategies were identified as being implemented by garment-making micro-enterprises. Based on the results of this study, it is concluded that interactive marketing is the most implemented strategy while e-marketing is the least. However, further research is required to explore the impact of implementing the various marketing strategies on the growth of the enterprises.

Key words: Garment-making, micro and small enterprises, marketing strategies.

INTRODUCTION

To survive and out of necessity, many people engage in entrepreneurial activities such as garment-making as micro enterprises. These enterprises are aimed at providing specific goods and services to targeted apparel consumers. According to Mulu-Mutuku et al. (2004), many manufacturing micro-enterprises in Nakuru have generally stagnated in terms of growth mainly due to competition. This is witnessed especially in the garment making sector that is characterized by a variety of substitutes and free entry and exit into business.

*Corresponding author. E-mail: lydiankatha@yahoo.com, lnkatha@egerton.ac.ke

In such a situation, marketing is a major issue that needs to be addressed if the micro enterprises are to survive (Ngoze, 2006). The garment-making entrepreneurs must thus adopt marketing strategies that will make them achieve a competitive advantage and enable them remain relevant in the market place.

Stokes and Wendy (2008) argue that marketing plays an essential role in micro-enterprises' growth. This is mainly because a marketing strategy aids in identifying customers who the business can competitively serve, and tailoring product offerings, prices, distribution, promotional efforts, and services towards those customers. In addition, a sound strategy enables an enterprise to develop long-range plans which ensure survival, profitability, growth, and perpetuity (Schiffman and Kanuk, 1992; Cohen, 2000; Fifield, 1992).

Though the textile and clothing sector is a main focus for investment and principal in the development and growth of a country (Ikiara and Ndirangu, 2002), marketing at the micro level in Kenya has not received much attention from researchers. The sector is characterized by a dynamic environment and intense competition caused mainly by globalization, trade liberalization, importation of the second-hand (*mitumba*) clothes and imported new clothing (Kinyanjui and McComick, 2002; Malinowska-Olszowy, 2005; Mangieri, 2006). In addition to the above aspects, there is low demand for locally designed clothing (Elung'ata, 2003). Thus, garment making micro-enterprises in Kenya have the challenge to adopt marketing strategies that will enable them to be more competitive as well as face the threats from the liberalized market (Gakure, 2006).

Ngoze (2006) indicates that one of the major problems for micro-entrepreneurs is how to market their products. There is limited research on marketing strategies used by owners of micro-enterprises in garment making, yet marketing is very critical for business survival and growth (Björk et al., 2004). According to Li et al. (2008), micro-enterprises and large enterprises have different characteristics or approaches to marketing. This study identifies those approaches inherent in the garment-making micro-enterprises in order to gain an understanding of those strategies that are commonly used. This will help entrepreneurs in choosing the strategy to use as well as provide potential entrepreneurs with information on what is being practiced. With this information, an entrepreneur will devise creative and innovative ways of being unique as well as being competitive. It was hypothesized that there was no variation in the marketing strategies undertaken by various garment-making micro-enterprises in Nakuru town.

METHODOLOGY

Based on a total target population of 385 micro-enterprises dealing with garment-making in Nakuru Municipality, confidence level of 0.05 and confidence interval of 3, a sample of 295 respondents was used for the survey. The sample was selected using a table of random numbers. In addition, 40 respondents participated in the interviews (10% of total target population). The primary method used for data collection was a questionnaire that comprised 27 items on a 5-Point likert scale ranging from "all the time" to "never" in relation to the types of marketing strategies that were adopted. According to Mugenda and Mugenda (1999), a sample size of 1 to 10% of the population may be selected for the purpose of pre-testing the research instrument. A sample of 30 respondents was thus used for the survey while 10 respondents were used for the interview to ascertain the reliability of the research instrument. Cronbach's Alpha coefficient was used to test the reliability of the data collection instrument since it required only a single administration to provide unique estimate of the reliability for the given test. It also gave the average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests. The pre-tested questionnaire had a reliability coefficient of .795.

RESULTS

Principal component analysis using Varimax rotation method was used to identify the factorial structure of 27 items and reduce them to smaller number of variables (strategies). The principal component analysis was used for purposes of data reduction and generation of components that represented the strategies as variables (uncorrelated). Five items having factor loadings less than 0.5 were excluded from further analysis. The remaining 22 variables yielded eight strategies, namely; E-marketing; Interactive Marketing; Market Penetration; Pricing; Branding and Cost Reduction; Product Differentiation; Customer Focus; and Product Quality. These strategies had eigenvalues greater than 1 and the total variance accounted for was about 64%. This indicates there are the eight strategies are associated with marketing efforts by the garment-making micro-enterprises (Tables 1 and 2).

Interactive marketing

Interactive marketing strategy accounted for about 8% of the variance with a mean factor loading of .685. Majority of the respondents (66%) indicated having implemented interactive marketing as a strategy. This was the most implemented strategy and was ranked the first (Table 2). These results are consistent with Stokes and Wendy's (2008) arguments that most of the entrepreneurs spend most of their time and resources building relationships with customers who, when satisfied, recommend the business to others. According to Gwin (2009), interactive marketing is considered to be the best approach to creating value for the customer as well as being fundamental in satisfying customer's current and future needs. It is based on ensuring that the customers are well-taken care of. Based on the interview results, this strategy was enhanced by talking to the customers; listening to what they want; giving them full attention

Table 1. Rotated component matrix for marketing strategies.

Marketing strategy variables	Component								Communality
	1	2	3	4	5	6	7	8	
E-marketing									
communicate to customers through internet	.860	.071	.049	.012	-.073	.012	.046	-.081	.762
sell through internet	.843	-.025	.034	-.082	.132	-.017	-.036	.027	.738
source designs from internet	.731	.083	.074	.073	-.091	-.062	-.001	.023	.565
Market Penetration									
look for new ways to market designs	.073	.760	.118	-.079	-.018	.226	.113	.295	.755
only make clothes by order	.066	.697	.074	.128	.084	.147	.026	-.055	.544
constantly looking for new customers	-.022	.662	.206	.155	.149	-.153	-.119	-.029	.565
Branding and Cost Reduction									
have a business name	.057	.132	.790	-.048	.125	.206	-.018	-.290	.789
use modern machines	.096	.056	.760	.009	.025	-.261	-.010	.068	.664
employees paid for the work done	.028	.176	.652	.156	-.093	.041	.120	.152	.529
Interactive Marketing									
ask for feedback/evaluation	.030	.030	.011	.782	-.068	-.010	.127	-.012	.634
serving customers very important	.117	.134	.108	.720	.113	.171	-.014	.161	.630
Strong commitment to our customers	-.414	.092	.012	.554	-.034	.045	-.004	-.041	.492
Customer Focus									
customers opinion important in style decisions	-.088	.135	-.023	-.089	.754	-.138	-.011	.029	.623
focus on having as many customers as possible	.074	.079	.021	.219	.681	-.124	.274	.018	.614
set prices to increase flow of customers	.002	-.022	.060	-.101	.656	.439	.016	-.094	.646
Pricing									
our prices always lower than competitors	-.104	.017	-.018	.085	.011	.766	.027	.179	.639
prices based on market price	.046	.327	-.056	.161	-.171	.630	-.071	-.236	.625
Product Differentiation									
Keen on new designs that are on fashion	-.094	-.082	.159	-.066	.026	-.005	.715	-.034	.559
offer after sale services	.110	-.121	-.089	.168	.099	.136	.669	.076	.545
strive to have unique designs all the time	.003	.323	.000	.050	.074	-.164	.662	-.011	.578
Product Quality									
consider quality rather than price in choosing fabrics	-.114	-.079	.042	.007	.116	.212	-.066	.841	.791
emphasize on workmanship	.124	.257	-.051	.130	-.178	-.241	.110	.703	.697
Initial Eigenvalues (total)	2.892	2.314	1.79 2	1.727	1.566	1.408	1.16 0	1.126	
% of variance	10.32	8.742	7.977	7.606	7.529	7.290	7.083	7.018	
Cumulative % of variance	10.32	19.06	27.04	34.64	42.17	49.46	56.55	63.564	
Number of items (total = 22)	3	3	3	3	3	2	3	2	

Note. N of Cases = 256; Extraction Method, Principal Component Analysis; Rotation Method, Varimax with Kaiser Normalization, Kaiser-Meyer-Olkin Measure of Sampling Adequacy= 0.599, Bartlett's Test of Sphericity, X^2= 1145.081, p = 0.000; df= 231, Rotation converged in 8 iterations.

when they walk in; and as well as negotiating at a personal level. This was possible since the business people had direct contact with the customers.

Branding and cost reduction strategy

This strategy explained 8% of the variance with a mean

Table 2. Implementation of the Marketing Strategies by the Micro-enterprises

Strategy	Implemented	Did not implement	Ranking
Interactive Marketing	170 (66%)	86 (34%)	1
Branding and Cost Reduction	155 (61%)	101 (39%)	2
Customer Focus	146 (57%)	110 (43%)	3
Market Penetration	144 (56%)	112 (44%)	4
Product Differentiation	141 (55%)	115 (45%)	5
Pricing	119 (46%)	137 (54%)	6
Product Quality	96 (37%)	160 (63%)	7
E-marketing	54 (21%)	(79%)	8

factor loading of .734. This strategy was implemented by 61% of the respondents while 39% did not. In garment-making, most branding is based on the owner's name(s). From the results of this study, most of the respondents indicated that they had a business name by which the customers identified them with. From the interview results, most of the businesses were named after the name of the owner. Most of the respondents (who use their names as a brand name) expressed that it was difficult to change the names since most customers were already used to refer to them that way. According to Azevedo and Farhangmehr (2005), brands provide emotional and self-expression benefits to the customers thus leading to business success since the customer tends to associate the product with the manufacturer. For example, a customer who is loyal to a particular designer derives satisfaction which makes him/her make repeat purchases. Gwin (2009) argues that repeat purchases are likely to take place if the customers identify with a particular product brand or name (owner's name or the business name) and associate that name with the manufacturer. This means that garment making enterprises that had a business name were likely to retain customers; hence more orders that translated to more profit. However, to build an image in the clothing market, advertising, quality and workmanship of the garment is of great importance.

Under this strategy, micro-enterprises also sought various ways of reducing or minimizing costs. Use of modern machine such as electric sewing machines, over-lock and embroidery machines increase efficiency, hence, reduction of the operating costs. One of the interviewees indicated: "*Electric sewing machines are faster, neater and easier to use*". This implies that when using an electric sewing machine, one is able to make many pieces within a given time as opposed to the manual machines; hence reducing time spent. Results also indicated that workers were paid for the work done. This kind of arrangement ensured minimum costs of production since the workers were contracted only when there was work to be done. This was viewed as cost effective as opposed to a waged or salaried worker who needed to be paid at the end of the month whether or not there was work. Based on these results, it is clear that most entrepreneurs in garment making look for ways of cutting costs. This showed that they were applying the principles of remaining competitive as posited by Bharradwaj et al. (2005), Gakure (2006) and Ngoze (2006), that for a business to be competitive, the enterprise needs to be the lowest cost producer relative to its competitors.

Customer focus

This strategy accounted for 8% of the variance with a mean factor loading of .697. This strategy was adopted by 57% while 43% did not adopt it at all. A customer-based strategy involves planning on how to handle the customers at every point and it is practiced by enterprises that are customer-centric. All the respondents interviewed were in agreement that the customer know what he/she wants and one has to listen to him or her (have products as per customer needs). Stokes and Wendy (2008) indicate that micro-enterprises adopt a customer-oriented strategy in order to survive and thrive in a competitive market. Based on this study, it is clear that garment-making micro-enterprises take customer opinion as regards to prices very important while devising ways of having as many customers as possible.

Market penetration

Market penetration as a strategy accounted for 9% of the variance with a mean factor of .706. It was undertaken by 56% of the respondents. Stokes and Wendy (2008) posit that enterprises implement this strategy with the aim of increasing their customer base as well as sales without making major changes on their products. The results indicate that most of the garments making micro enterprises focus more on the market. Market penetration as a strategy was introduced by Ansoff as an alternative strategy which links products to the markets with the least risk in the large firms (Kotler and Armstrong, 1994). However, this strategy is also applicable to micro-enterprises because it seeks to increase the market share with the existing products. This means that one has to keep on looking for new ways to market his/her designs and constantly look for new customers.

Product differentiation

Product differentiation accounted for 7% of the total variance with a mean factor loading of .682. Those that implemented this strategy were 55% while 45% did not implement it. In garment making micro-enterprises, differentiation is achieved by having new and unique designs as well as offering "after sale" services. Based on the interviews, the most after sale services offered are ironing and quantity discounts. A customer who is price-sensitive would be loyal to a specific garment maker since he/she knows he/she will make discounts based on how many items he/she orders and the frequency of placing the orders.

The garment making entrepreneurs are also keen on what is in the market (fashionable), in order to ensure that their products are unique thus creating a competitive edge. Swinker and Hines (2007) hypothesized that fashion consumers are also keen on what is on fashion and would always want to be unique since clothing is used as a way of extending oneself. Interview results also indicated that fashion consumers want unique designs. Some interviewees indicated that fashion conscious customers hate to see someone else with similar designs and if this happens, they will never wear that garment even though it may be new.

Pricing

Pricing accounted for 7% of the variance with a mean factor loading of .698. The pricing strategy was implemented by 46% of the respondents while majority (54%) did not. According to Stokes and Wendy (2008), the pricing strategy can be equated to the price penetration approach. Based on the results, those who utilized this approach aimed at keeping prices as low as possible in order to achieve the highest level of sales. This indicates that some of the garment-making micro-entrepreneurs will always set prices lower than the competitors using the market price as the benchmark. These results tally with the remarks from some of the interviewees who indicated: "*cannot charge extremely high or low vis-à-vis the average market price*".

Product quality strategy

This strategy explained 7% of the variance with a mean factor loading of .772. It was implemented by 37% of the respondents marketing while 63% did not undertake it. This is an indication that few entrepreneurs in garment making pay attention to quality of the products. The interview results indicate that good quality is one of the demands that customers make when they order garments. According to Stokes and Wendy (2008), product quality refers to the benefits to the customer as a result of using the product and the actual product features or characteristics that create these benefits. The quality of the fabric is important in garment-making because it affects the hand feel, texture and other performance aspects of the product. One of the interviewee indicated; "*Quality of a fabric is a thing one learns with experience, once you can distinguish between poor and good quality you can offer the best*".

Swinker and Hines (2007) indicate that majority of the fashion consumers (65%), consider quality as important in their clothing purchase. Thus, the entrepreneurs in garment-making micro-enterprises have the obligation to ensure that products presented to the consumers are made of good quality material with excellent workmanship. However, from this study, product quality was not a priority area. This explains why business in second hand clothing continues to thrive in Kenya since the clothes are viewed to be of higher quality as compared to custom-made clothing.

E-marketing

E-marketing strategy had factor loadings that ranged from .731 to .860 with a mean factor loading of .811. These explained 10% of the variance. Majority of the respondents (79%) indicated that they never undertook E-marketing with only 21% indicating that they undertook it. It was the least adopted strategy among those identified (Table 2). This means that garment-making micro-enterprises in Kenya have not yet embraced the usage of internet as a means of communication or for sourcing for designs, though it is viewed as a modern business practice.

These results are consistent with the findings of Kinyanjui and McCormick (2002) that most Kenyan garment making enterprises do not engage in E-marketing. Stokes and Wendy (2008) observed that the full impact of the internet on competitive strategies is yet to be seen among entrepreneurs. Based on the interview results, the main ways of communicating to the customers are through cell-phones and face-to-face.

However, there is need for the garment-making micro-entrepreneurs to embrace the internet more as a communication tool as well as a source of inspiration for the latest design ideas. This means there is need for computer training to equip the entrepreneurs with skills necessary to effectively implement this strategy.

Testing of the hypothesis on variation of marketing strategies

To test the hypothesis that there is no variation in the

Table 3. Chi-square goodness-of-fit test statistics for the marketing strategies.

Strategy	Chi-Square	df	Asymp. Sig.
E-marketing	85.562[a]	1	.000*
Interactive Marketing	27.562[a]	1	.000*
Product Quality	16.000[a]	1	.000*
Branding and Cost Reduction	11.391[a]	1	.001*
Customer Focus	5.062[a]	1	.024*
Market Penetration	4.000[a]	1	.046*
Product Differentiation	2.641[a]	1	.104
Pricing	1.266[a]	1	.261

Note. a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 128.0. *Significant.

marketing strategies undertaken by garment making micro enterprises, Chi-square goodness-of-fittest was used (Table 3).

The results indicate that there was variation in the distribution of six strategies which was statistically significant. The P-values were less than 0.05 and chi-square values were more than the critical value (3.84 at 0.05 confidence level and 1 *df*). These include E-marketing; Market Penetration; Branding and Cost Reduction; Interactive Marketing; Customer Focus; and Product Quality. However, two strategies had P-values of more than 0.05 and Chi-square value less than the critical value (Pricing and Product Differentiation); meaning that they did not vary in the distribution across the garment-making micro-enterprises. This means that entrepreneurs in the garment-making enterprises commonly implement Pricing and Product Differentiation strategies while there is a difference in the implementation of the other six strategies. This implies that these two strategies are very crucial in garment-making. However, entrepreneurs in garment-making micro-enterprises need to diversify their strategies in order to be unique and gain a competitive edge.

CONCLUSION AND RECOMMENDATIONS

The results of this study indicate that there are various strategies that micro-enterprises can embrace as they try to market their products. Pricing and product differentiation were implemented across all the enterprises. Thus entrepreneurs in garment making or fashion design need to be keen on how they price their products and vary their design for them to remain competitive. Interactive marketing was the most implemented while E-marketing was the least implemented. For entrepreneurs to successfully implement e-marketing, they to be empowered so as to embrace the changes in technology. However, there is need for further research to investigate the most effective strategy/strategies to use in garment-making micro-enterprises, highlighting those that are important and relating them to business performance/growth. This study can also be extended to other major towns such as Kisumu, Mombasa, Nairobi, Eldoret and Nyeri and comparisons need to be made.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

Azevedo A, Farhangmehr M (2005). Clothing branding strategies: Influence of brand personality on advertising response. J. textile and Apparel, Technol. Manag. 4(3):1-13.

Bharradwaj S, Clark T, Kulviwat S (2005). Marketing, Market growth and Endogenous growth theory: An inquiry into the case of market growth. J. Acad. Market. Sci. 33(3):347-359.

Björk P, Lindquist LJ, Poukkula K, Ravald A, West BA (2004). A theory of marketing-in-use in micro firms - preliminary findings. Finland. http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.203.1574

Cohen L, Manion L, Morrison K (2000). Research methods in education. New York, Routledge: Taylor & Francis grp.

Elung'ata B (2003). Factors influencing the business viability of local apparel traders within a liberalized market.A case of Nairobi, Kenya. Unpublished manuscript, MSc TCD, Kenyatta University.

Fifield P (1992). Marketing Strategy. New Delhi: Butterworth Heimann.

Gakure RW (2006). Factors affecting growth of small and medium hand craft enterprises in Nairobi, Kenya. Paper presented during the 3rd International Entrepreneurship conference held at USIU 29th to 30th May 2006.

Gwin CF (2009). The Impact of Trust and Brand Relationship Quality on Perceived Value and Loyalty in a Consumer Goods Environment. http://www.swdsi.org/swdsi2009/Papers/9N01.pdf

Ikiara MM, Ndirangu LK (2002). Developing a revival strategy for the Kenyan cotton-textile industry: A value chain Approach Kenya Institute for Public Policy Research and Analysis (KIPRRA). Unpublished manuscript.

Kinyanjui M, McCormick D (2002). E-commerce in the garment industry in Kenya: Usage, obstacles and policies. http://r4d.dfid.gov.uk/PDF/Outputs/Mis_SPC/R7930c.pdf

Kotler P, Armstrong O (1994). Principles of Marketing.New Delhi: Prentice-Hall of India.

Li Y, Guohui S, Eppler MJ (2008). Making Strategy Work: A Literature Review on the Factors influencing Strategy Implementation. ICA Working Paper 2/2008. http://www.knowledge-communication.org/pdf/making-strategy-work.pdf

Malinowska-Olszowy M (2005). Brand strategy in the clothing and textile market. Fibres and Textiles in Eastern Europe 13(49):8-17 http://www.fibtex.lodz.pl/49_05_08.pdf

Mangieri T (2006). African Cloth, Export Production, and Secondhand Clothing in Kenya. http://www.cggc.duke.edu/pdfs/workshop/Kenya%20cloth%20&%20clothing.pdf

Mulu-Mutuku M, Namusonge GS, Odhuno A (2004). Effects of Training on Manufacturing Micro-enterprises' Growth in Nakuru, Kenya. Paper presented during the 2nd International Entrepreneurship conference held at USIU 12th to 14th May 2004.

Mugenda D, Mugenda A (1999). Quantitative and Qualitative Approaches: Research Methods. Kenya Act Press.

Ngoze ML (2006). Barriers inhibiting growth of small enterprises in Kenya.Paper presented in the Second Annual 2006 San Francisco-Silicon Valley Global Entrepreneurship Research Conference on March 22-25, 2006 San Francisco, California. http://www.usfca.edu

Schiffman LG, Kanuk LL (1992). Consumer Behavior. New Delhi: Prentice-Hall of India.

Stokes D, Wendy L (2008). Marketing: A brief introduction. Thomson

Learning
http://cws.cengage.co.uk/stokes_lomax/students/Student's%20supplement.pdf
Swinker ME, Hines JD (2007). Understanding consumer's perception of clothing quality: a multidimensional approach. Int. J. Consum. Stud. 30(2): 218-223.

African Journal of **Marketing Management**