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THE PERFORMANCE OF “PAKISTAN FISCAL RESPONSIBILITY AND DEBT LIMITATION” (FRDL) ACT 2005

Imran Naveed Khan¹

Abstract

Several countries have controlled severe debt problem with the help of formulation of debt management policies and fiscal responsible framework. Total debt has shown rising trend during the last thirty-six years and Pakistan public debt/GDP has been about 91.8% at the start of the 21st century. Pakistan government has also formulated the debt management policy to diminish the debt burden in the economy in the form of FRDL Act 2005. This study analyses the performance of FRDL Act for the period of fiscal year 2003 to fiscal year 2015. Consequently, the PD/GDP ratio fell to 53% in FY07. After that, PD/GDP ratio started to increase and moved around 65% during FY12-FY15, higher than the 60 % limit fixed in FRDL Act 2005. As a result, per capita debt burden jumped to Rs. 104530 (US\$1027) in FY15 compared to Rs.31308 (US\$518) in FY07 and average household family burden rose by more than double during this period. Twin deficits, higher subsidies, double digit inflation, drying up of external program loans, lower revenues, transfer of the 70 % federal govt. collection to the provinces under the 7th National Finance Commission (NFC) Award, undeveloped domestic debt market and currency devaluations were the major factors responsible for violation of the FRDL Act 2005.

Keywords: Stabilization, Debt Management, Public Debt, Fiscal Responsibility.

JEL Classification: H390

Introduction

Economic history shows that many countries have faced the debt problems for many years and they controlled the severe debt issues with the help of formulation of proper debt management policies or fiscal responsible frame works. For example, the ratio of public debt to GDP in the US had risen from 32.3% in 1974 to 65.7% in 1993. To tackle the debt problem, the US government had passed the “Omnibus Reconciliation Act” of 1993 (OBRA ² 1993) by raising the revenues and cut appropriations spending over the next five fiscal years (1994-98). Resultantly, public debt/GDP ratio

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² See OBRA 1993 better known as Deficit Reduction Act of 1993

fell to 54.7% in 2001. New Zealand faced a similar problem of higher debt to GDP ratio in 1980s. In 1985, public debt/GDP (PD/GDP) ratio was at 71.8% compared to 63.1% in 1994. The New Zealand “Fiscal Responsibility Act 1994” designed to improve the fiscal performance and management to bring a long-term concentration to budgeting. Consequently, public debt/GDP ratio fell to 37.6% in 1998.

The historic balance of India resulted in many changes in the Indian economy, comprising the procedure of economic liberalization in India. In 1991, public debt/GDP ratio of India noted at 75.6%, which rose to 84.3 % in 2003. To tackle these changes, Indian government introduced the “Fiscal Responsibility and Budget Management Bill” in 2000 which subsequently changed to the “Fiscal Responsibility and Budget Management” (FRBM) Act 2003.

Like others, Pakistan also faced debt problem for many years and volume of the total debt has shown rising trend during the last thirty-six years. At the start of the 21st century, Pakistan public debt to GDP ratio was about 91.8 %. Pakistan government has made efforts to reduce the debt burden in the economy. Pakistan govt. introduced the “Fiscal Responsibility and Debt Limitation” (FRDL) Act 2005 on 13 June, 2005 for removal of revenue deficit and decline of public debt to a reasonable level by effective “debt management”. As a result, PD/GDP ratio fell to 53.0% in FY07. After that the PD/GDP ratio starting to increase again and moved around 65 % during FY12-FY15, much higher than the limit fixed in FRDL. The objective of this study is to appraise the performance of FDRL ACT for the stipulated time FY03-FY15. The plan of this research is as follows:

Section II analyses the relevant literature and section III delivers a brief discussion on several countries’ debt management policies or fiscal responsible frameworks to handle the debt problems. Section IV discusses the debt structure of Pakistan during the last thirty-six years (FY79-FY15). Section V provides discussion on methodology, data, and sources of different variables used for the debt analysis and FRDL limitations. Section VI describes the performance of FRDL Act 2005 during FY03-FY15. Section VII discusses the conclusion of the study.

Literature Review

Various studies have estimated the connection between the debt and real GDP. Three views prevail in literature regarding the impact of deficits/debt on economic activity. Sawhney and Di-Pietro (1994) studied the influence of public debt/deficit on the economic performance of cross-sectional data for 50 countries during 1976-83 and showed that capital, labor, human capital, and trade openness contributed significantly while debt and deficits have insignificant impact on economic growth. Smyth and Hsing (1995) examined the presence of an optimal debt to GDP ratio that maximizes “economic growth of USA” for 1960-91. The results show that economic growth and its determinants were co-integrated and have a stable long-run relationship. Optimal debt ratio (is 38.4%) for public debt and 48.9% for total debt in the USA which are much higher than the debt fixed in the Budget

Reconciliation Bill of 1993. Friedman (1992) bids many insightful observations about debt issue and deficits in the Reagan administration (the 1980's). Declines in expenditure were less than the cuts in tax receipts. Private investment fell because of greater deficits. The "Laffer curve" has positive slope. Therefore, cut in tax rates dropped the total tax revenues, which leads to massive deficits.

Barro (1989) examined the economic effects (particularly on consumption and current account balance) of budget deficits in terms of Ricardian and others standard views, which explained that there is no correlation between budget deficit and real interest rate whereas many economists such as Evans (1988) tested these proposition and found a little/weak relationship between budget deficits and interest rate. Baker (2005) analyzed the second term of President Bush administration in regards to foreign challenges, reasons for historical highest budget deficits, and its impact on the world economy. In this article he also criticized the lack of economic leadership in cutting its budget deficits and examined the impact of serious efforts (if it took place) for reduction in the US fiscal deficit on helpful in stabilizing international capital flows, depreciation of US\$, and exports of economic partners.

Koeda (2008) presented a model to describe how debt overhangs generated in LIC and its implication for design and formulation of policies for aid and relief of debt. He found that the analysis of debt-overhang and debt relief policies depend on the primary economic conditions and factor productivity in the recipient country. Siddiqui and Afia (2001) discussed the link between economic growth and debt in South Asian economies and found that debt burden indicators (debt/GDP, debt servicing to export ratio, etc.) highlight the importance of improving macroeconomic management by the efficient use of resources to reduce debt burden. As far as the Pakistan debt burden was concerned, the mismanagement of resources, loss of competitiveness in global market, macro imbalances, and the role of political agents has seriously raised the debt burden.

Ahmad et al. (2000) elaborated the crucial issue of acceleration of economic growth in developing economies and investigated causality between export growth, economic growth, and external debt by using the cointegration test to Asian countries (South Asia and South East Asia region separately) during 1970-97. Reinhart and Rogoff (2010) analyzed the relationship of inflation economic and growth at different debt levels for 44 countries for two centuries. The main results of this study are (a) the relationship between economic growth and government debt is weedy for debt/GDP ratio below 90%, (b) above 90%, median growth rates decline by 1%, and average growth falls much more, (c) threshold level of public debt is similar in emerging and advanced economies, (d) when foreign debt to GDP ratio reaches 60%, annual economic growth decline by 2%, (e) for higher external debt to GDP ratio, growth rate slash by half %, and (f) there was a strong relationship between inflation and debt level in emerging economies, inflation rises sharply as debt increases.

Greenidge et al. (2012) tackled the issue of threshold effects between economic growth and public debt for 12 Caribbean countries for 1980-2010 and found that a threshold debt/GDP ratio (of 55-56%) prevailed in the countries. In addition, debt dynamics also change before the threshold level.

Lower than 30% debt/GDP ratio related with faster economic growth. After that level effect on economic growth weakens quickly and as debt/GDP reached at 55-56% level, the growth impacts switched from positive to negative.

Review of selected economies³ debt management policies and fiscal responsibility framework

A large number of debt management and fiscal responsibility frameworks were developed all over the world in 1990s, which includes both developed and developing economies to handle the fiscal discipline. These policies dealt with the issue of short term movements of deficits/debt ratios and long-term commitments. The main objective of FRBM⁴ act was to institutionalize financial discipline, improve macroeconomic management, and reduce India fiscal deficit. Following were the main fiscal targets/indicators of FRBM act:

- “To eliminate the revenue deficit by March 31, 2009.
- Minimum annual reduction of revenue deficits by 0.5% or more of GDP at the end of each fiscal year, beginning of 2004-05
- The ceiling for fiscal deficit is 3% of GDP by March 31, 2008.
- Minimum annual reduction of fiscal deficits by 0.3% of GDP.
- Total debt to GDP ratio fixed at 9% (a target increased from the original 6% requirement in 2004-05).
- Total debt/GDP ratio reduces by 1% on annual basis.
- Reserve Bank of India purchase of Government bonds – to cease from April 1, 2006’.

Nevertheless, due to 2007 global crises, deadlines or implementation of the targets in the act was postponed and deferred in 2009. In 2011, Indian government reinstated the provisions of the FRBMA. Some of the major findings are presented below.

³ These economies were randomly selected and lot of material is available in literature regarding the performance of debt management in these economies.

⁴ See FRBMA 2003

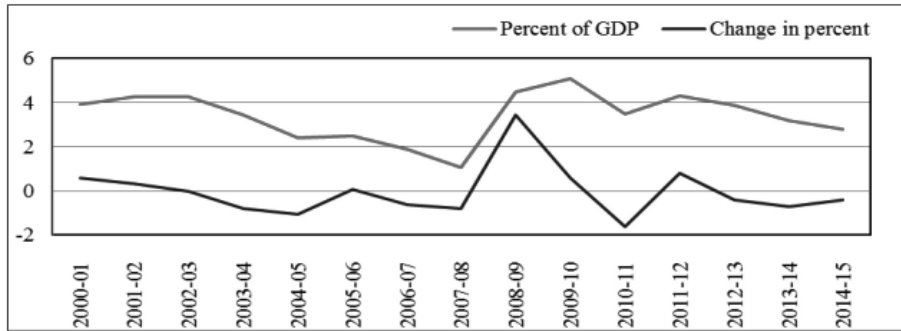


Figure 1: India Revenue Deficit

The performance of Indian government regarding revenue target (both in percent of GDP and growth) is presented in Figure-1. Similar trend was also seen in the performance of gross fiscal deficits during 2004-05 to 2011-12 (Figure 2).

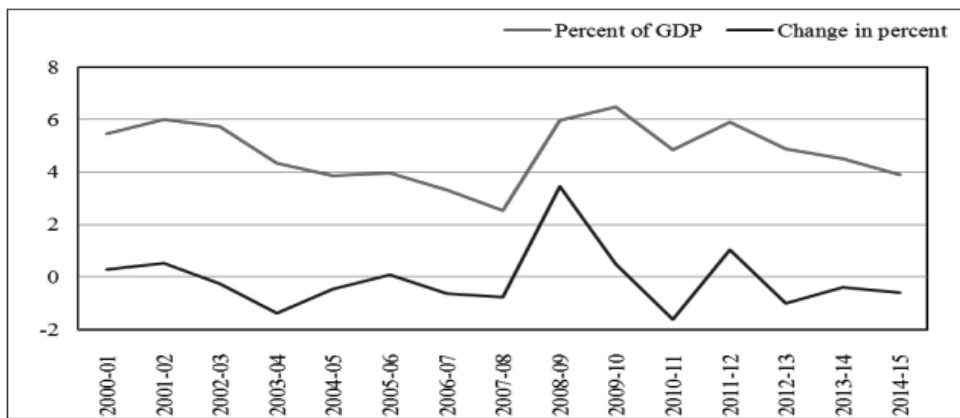


Figure 2: India Gross Fiscal Deficit

The OBRA-93⁵ was passed by congress and signed by President Bill Clinton. The main points of OBRA-93 were as following:

⁵ It also known as the “Deficit Reduction Act” or “Revenue Reconciliation Act “of 1993.

Table-1 demonstrates the major categories of deficits reduction over the time period of 1994 to 1998. The reduction in deficits was a combination of increase in revenues as well as decline in the expenditure. As results of efforts made in OBRA-93, the US public debt to GDP ratio declined from 65.4% in 1993 to 60.8% in 1999 and further fell to 53% as GDP in next two years (see Figure 3).

Table 1:
Selected Major Categories of Deficits Reduction (billion US\$)

Categories	1994	1995	1996	1997	1998	Total
Revenues	29	44	48	61	59	241
Mandatory Cuts	11	12	21	25	30	99
Discretionary Cuts	9	15	17	25	36	102
Interest Savings	1	4	9	16	24	54
Total	50	75	95	127	149	496

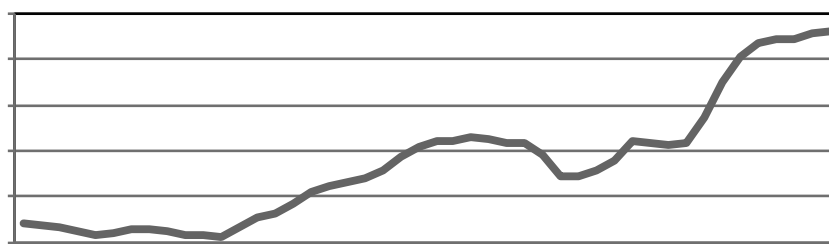


Figure 3: Public Debt to GDP Ratio in USA

New Zealand economy also faced severe debt problems in early 1990s. Government expenditure increased to about 40% of GDP in early 90s against 30% of GDP in 70s. This rise in expenditure was shared by rising benefit expenditure and higher debt servicing. Public debt/GDP augmented from 40.6% in 1974 to 76.1% (a peak level) in 1987. To improve the fiscal or debt management, New

New Zealand government introduced the “Fiscal Responsibility Act” (FRA⁶) in 1994 to identifying principles of fiscal responsible management and firming reporting requirements. Following were the five principles for effective fiscal management policy as discussed in FRA-1994:

⁶ Improve fiscal policy, code identification for responsible fiscal management and firming reporting requirements were the main goals of FRA.

- 1.Reducing total Crown debt to prudent levels¹⁰ so as to provide a buffer against factors that may impact adversely on the level of total Crown debt in the future by ensuring that until such levels have been achieved, the total operating expenses of the Crown in each financial year are less than its total operating revenues in the same financial year.
- 2.Once prudent levels of total Crown debt have been achieved, maintaining these levels by ensuring that, on average, over a reasonable period of time, the total operating expenses of the Crown do not exceed its total operating revenues.
- 3.Achieving and maintaining levels of Crown net worth that provides a buffer against factors that may impact adversely on the Crown's net worth in the future.
- 4.Managing Prudently the fiscal risks facing the Crown.
- 5.Pursuing policies that are consistent with a reasonable degree of predicatibility about the level and stability of tax rates for future years.

It is important to note that departure from the principles is possible. However, in that case the law requires such departures to be short lived and that the Finance Minister describes the situation which resulted in the depart. During the first half of 1990s, New Zealand fiscal position improved mainly on the basis of reduction in expenditure while the revenue as percent of GDP remained broadly stable. The fall in spending partly reflects fiscal surpluses, lower finance costs, and sales of asset to reduce the overall debt. In addition, decline in expenses through the 1990s also moderately reveals the economic upswing and the allied reduction in unemployment benefit costs. The fiscal discipline in the core public sector and rise in the age of entitlement for New Zealand Superannuation (NZS) also backed the decline in expenses-to-GDP. Changes in the debt/GDP ratio (both public debt and net debt) improved significantly after the implementation of the FRA-1993 (see Figure 4).

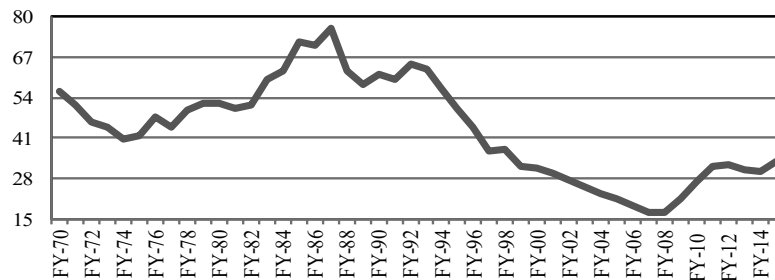


Figure 4: New Zealand Public Debt to GDP Ratio

Similarly, UK government has set out numerous fiscal policy principles in 1997. The Golden Rule was introduced by Mr. Gordon Brown in 1997 and approved in December 1998. These rule states that over the economic crises, the Government will borrow only for capital formulation (to

benefit for the future generations) and not for funding of current outlay. The framework of the “golden rule” is to maintain a stable allocation of resources in the business cycle. Stability is defined in terms of the following ratios:

1. “The ratio of public sector net worth to national income.
2. The ratio of public current expenditure to national income.
3. The ratio of public sector income to national income”

The UK witnessed 10% deficits/GDP (with one of the highest deficits in the G20). UK ran surpluses in just three years (1999-2001). From around 2002 a stubborn gap opened between expenditure and revenue which the Treasury did little to close. This gap expanded further in 2008 on the back of arrival of the financial crisis led to much lower tax revenue while spending continued to grow. The deficit in the public finances was due to higher spending than tax. During the period of 1997 to 2008, tax revenues to GDP ratio almost remained unchanged, around 37 percent of GDP. Figure 5 presented the trend of UK public debt as share of GDP with rising trend since 2002. The above analysis also shows that UK government has unable to control the expenditure as well as debt burden in the economy.

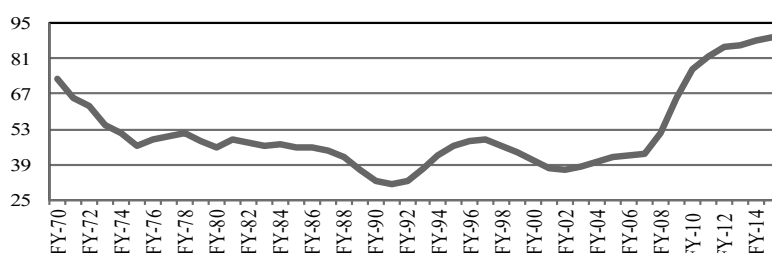


Figure 5: UK Public Debt to GDP Ratio

Howard Coalition Government had introduced the “Charter of Budget Honesty Act” (CBHA) in 1998⁷ in Australia to prevent an echo of the fiscal misrepresentation during the 1996 election campaign. This act provides a structure for fiscal policy and to improve fiscal policy outcomes, which is based on principles of comprehensive fiscal management. The Charter provides for the publication of regular updates of the state of the nation’s finances as a complement to the annual budget.

⁷ The aim of CBHA is to improve fiscal policy framework or fiscal strategy, which is based on rigorous fiscal management and performance of fiscal policy.

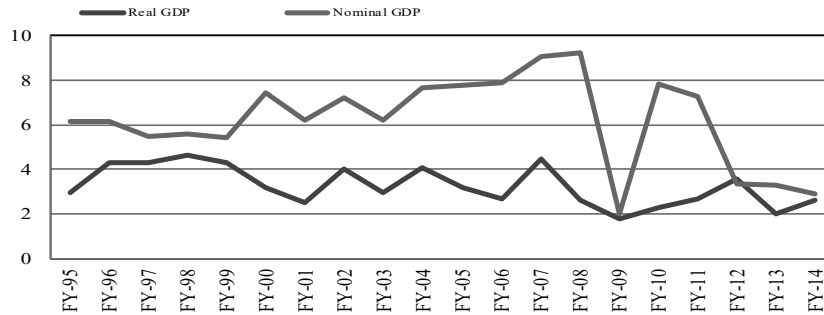


Figure 6: GDP Growth in Australia (percent)

Australia’s economic performance remained exceptional with a continuous economic growth over 20 years. Around 3.5 percent annual (average) real growth rate was recorded in the last decade, while nominal (average) growth rate was about 7.25 percent (see Figure 6). Australia’s outstanding economic performance is attributed to trade liberalization, abolishing foreign exchange controls, structural reforms, floating the Australian dollar, interest rate controls, independent Reserve Bank of Australia, inflation targeting, tax reform aimed widening the tax base, extensive privatization of government business enterprises, prolonged boom in commodity demand by China, India, and other developing countries and higher commodity prices.

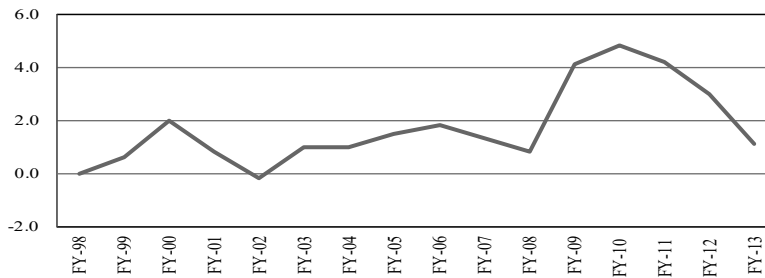


Figure 7: Australian Budget Balance (as percent of GDP expansion)

Similarly, Australia’s budget remained in budget surplus witnessed in Australian economy in last sixteen years except for 2001/02 with a modest deficit of 0.01%. Figure 7 shows the performance of Australia’s BB/GDP for the same period. The government used the budget surpluses, particularly

proceeds of the sale of assets⁸ to pay down debt. Resultantly, PD/GDP fell to 9.5 in 2005/06 (Figure 8).

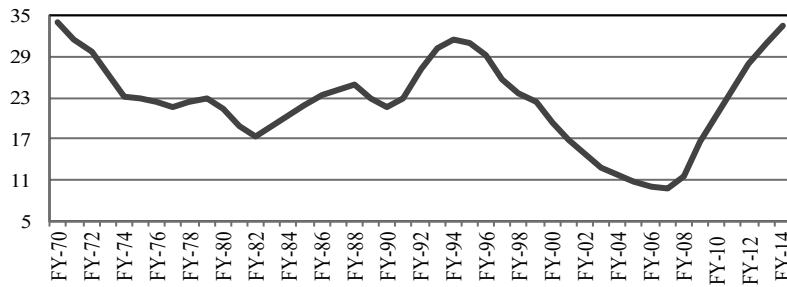


Figure 8: Australia Public Debt to GDP Ratio (percent)

Pakistan Debt Structure

The Pakistan economy continuously depends on internal as well as external resources for fiscal deficits financing.

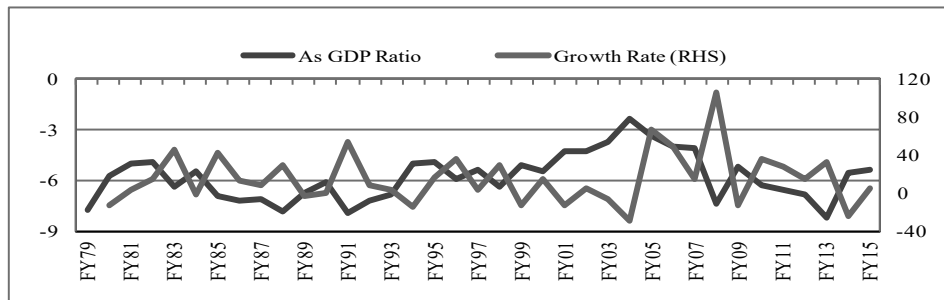


Figure 9: Fiscal Balances (in percent)

Figure-9 presented the eye views performance of Pakistan fiscal deficits in terms of growth rate and as percent of GDP for FY79-FY15 period. The highest fiscal deficit to GDP ratio was recorded at 8.2 in FY13 against the lowest ratio of 2.3 in FY04. The movement of fiscal deficits was the true picture of the variation of the trade balances and current account balances. Consistent trade and current account deficits were because of upward trend of imports, stagnant and non-diversify exports, rising debt services, and varying remittances (see Figure-10).

⁸ Including “privatization of government business enterprises” such as transaction of sale of Qantas Airways in 1995-96, sale of airports, auction of the first tranche of Commonwealth Bank in 1991, the sale of the first tranche (starting in 1997/98) and final tranche of “Telstra” (telecommunications company) in 2006, and concluding the sale of Sydney Airport in 2002.

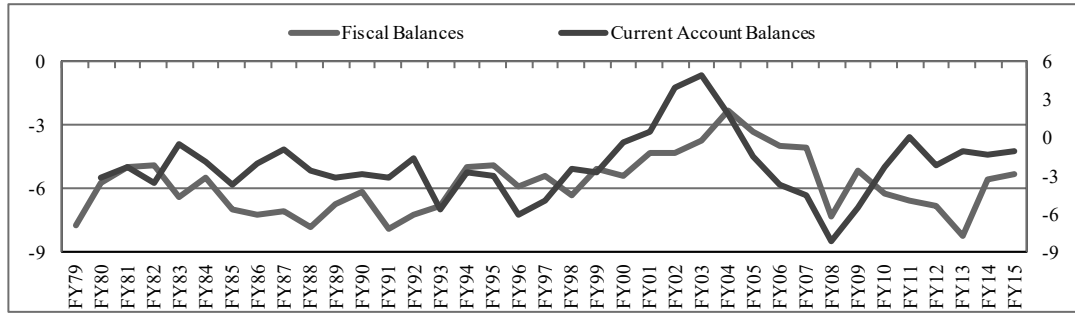


Figure 10: Fiscal and Current Account Balances (GDP ratio)

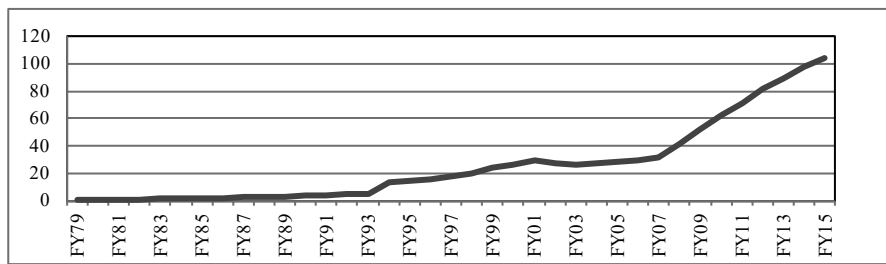


Figure 11: Pakistan Per Capita Debt Burden (000 Rupees)

A huge jump was observed in Pakistan total debt during the last nine years (FY07-FY15). Total debt reached to Rs. 19.85 trillion in FY15 compared to Rs. 5.05 trillion in FY07, showing a growth of 293.3 percent in the same period. The debt burden per capita amounted to Rs. 104530 in FY15 as against Rs.31308 in FY07-per capita burden rose by more than double during this period (see Figure-11). For an average household family (having 6.35 member per household in FY14), the debt burden surges to Rs. 663764 in FY14 compared with Rs. 267313 for average household family (with 6.58 members per household in FY07) in FY08.

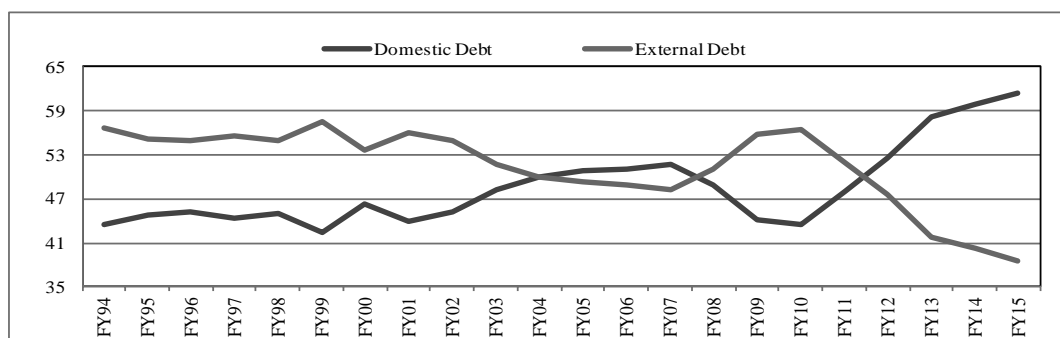


Figure 12: Share in Total Debt (in percent)

Figure-12 describes structure of Pakistan debt that includes domestic debt and external debt for the reviewed period. The domestic debt is denominated in local currency (Pak Rupee) and serviced as part of the government current expenditure, which has implication for fiscal gap, growth, and development expenditure. In contrast external debt service is to be paid in foreign currency (mostly in US\$) and variation in domestic currency and major currencies against US dollar has a strong impact on external debt stock and balance of payment. There are two components of change in EDL (1) change in the debt stock due to addition or repayment of debt, and (2) change in debt stock on the back of conversion of debt denominated in various currencies to Base Currency (BC), which owing to appreciation/depreciation of BC vis-a-vis other currencies. This variation is, generally known as gain/loss (translational change). The development (appreciation/depreciation) in US\$ with respect to major currencies has noteworthy impact on Pakistan's external debt.

During the first four years of 21st century (FY01-04), Pakistan's total external debt stretched to US\$35 billion with a translation loss of US\$4.8 following the appreciation of Pakistani rupee beside the dollar during this period, and dollar weakened against major international currencies. In the next three years, external debt, included liabilities, increased by US\$ 5.1 billion to US\$ 40.3 billion at the end of FY07. In this period Pakistan has earned "translational gain" of about US\$ 10 billion on appreciation of US dollar against major currencies, mostly against Japanese yen. During the last six fiscal years (FY08-FY15) the highest translational loss of US\$ 3349 million was recorded in FY11 (Figure-13), which was about 70 percent of the total increase of external debt of US\$ 4799 million and remaining addition was the new external debt. The depreciation of dollar against 3 currencies (euro, yen, and SDR) was the main contributors, having more than 94 percent share, in total translational loss in FY11. Pakistan's total EDL fell by US\$ 262 million during the year and reached to US\$ 65.1 billion by June 30, 2015. Despite substantial amount of credit payment by IFIs and mobilization of US\$ 1000.0 million through Sukuk in 2014-15, the stock of EDL declined on account of bulky US\$ 4.2 billion revaluation gains, which were realized due to appreciation of American dollar in terms of other

main currencies (euro, Yen, and SDR).

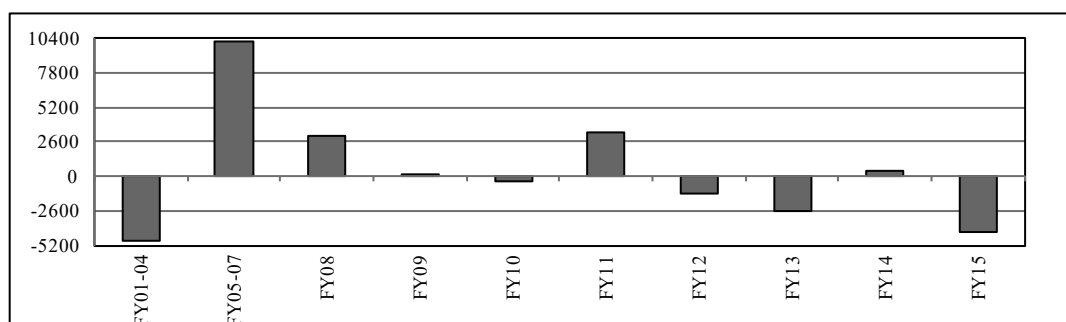


Figure 13: Valuation Impact-Gain/Loss (Million US\$)

The Methodology and Data Sources

To see the performance of FRDL Act 2005 during the study period, we have used the limitations settled for public debt/GDP ratio on 60% on June 30, 2013, reduction in debt/GDP ratio by 2.5% every fiscal year, poverty alleviation and social related spending are not reduced below 4.5 percent of estimated GDP for any given fiscal year, budgetary allocation to health and education, will be doubled from current level percent of GDP during the next 10 years, reduce “revenue deficit” to nil not later than June30, 2008, and then maintaining a revenue surplus, and not issue “new guarantee”, containing of rupee lending, rates of return, output purchase agreements, bonds, and all other claims & commitments that may be recommended from time to time, for any amount more than 2.0% of the projected GDP during any fiscal year.

The information about GDP, public debt, revenue balances, current expenditure, total revenues, social and welfare expenditures, budgetary allocation of health and education, and issuance of new guarantee were collected from Economic Surveys, State Bank of Pakistan Annual Reports, Handbook of Statistics of Pakistan Economy (SBP Publication), Pakistan fiscal operation ministry of Finance website, and various debt policy statements. The data on the above mentioned variables has been used for FY79-FY15, whereas for FRDL Act 2005 analysis, we have used FY03 to FY13 time period and in the next two years.

FRDL Act 2005 Developments during FY03-FY15

Pakistan government promulgated the FRDL Act 2005 on June 13, 2005 for abolition of revenue deficit and reduction of public debt by effective debt management. A performance report of

FRDL act is presented below:

1. "Ensure that within a period of ten financial years, beginning from July 1, 2003 and ending on June 30, 2013, the total public debt at the end of 10th financial year does not exceed 60 percent of the estimated GDP for that year and thereafter maintaining the total public debt below 60 percent of GDP for any given year."

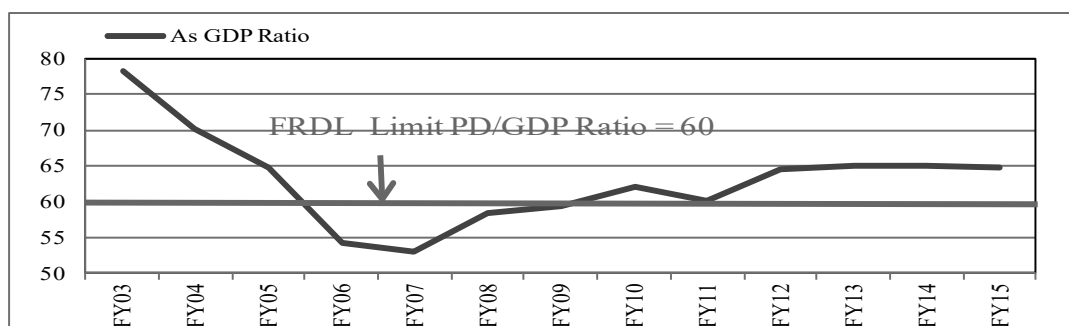


Figure 14: Pakistan Public Debt (in percent)

Government of Pakistan had accomplished the limit of PD/GDP as 60% within 3 years instead of 10 years (time decided in FRDL Act). TD/GDP ratio continuously dropped from 78.1% in FY03 to 56.4% as on June 30, 2007 (see Figure-14) due to incredible higher "economic growth" and somewhat stable exchange rate during the same period. In 2007-08, debt/GDP ratio start rising once again and reached 60.7% surpassing the 60% ratio set for end June 2013 and further moving upward to 64.5 in FY12 and moved around 65 percent in the next three years (FY13-FY15). Upward trend in debt/GDP ratio since FY08 was because of big current account deficit, higher trade deficit, around 263% growth in fiscal deficit, double-digit inflation (from FY08-FY12 with highest inflation of 17 percent and lowest inflation of 10.1 percent), 67.3 percent significant depreciation of PKR against US\$ (during FY07-FY15) as economic growth stayed slow.

2. "Ensure that in every financial year, beginning from July 1, 2003 and ending on June 30, 2013 the total public debt is reduced by no less than 2.5 percent of the estimated GDP for any given year; provided that the social and poverty alleviation related expenditures are not reduced below 4.5 percent of estimated GDP for any given year and budgetary allocation to education and health will be doubled from existing level in terms of percentage of GDP during the next ten years."

Government of Pakistan has effectively fullfil this requirement during FY03-FY06. At the beginning of FY03, the PD/GDP ratio stood at 78.1% while at the end of FY06 this ratio fell to 58.6 percent. In next year, PD/GDP further fell by 2.1 percent to 56.4 percent; just missed the limit of

reduction in PD/GDP ratio by 0.4 percentage points. After that year, government has never met the above said requirement of FRDL Act 2005 (see Figure-15). In FY12, PD/GDP ratio stood at 64.5 percent representing a surge of 4.3% against 1.9% fall in PD/GDP ratio in FY11. This raise was shared by addition of domestic and external debt on account of highest twin deficits in these years.

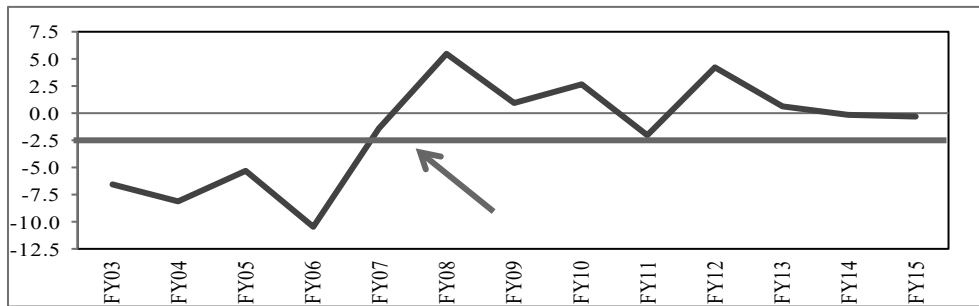


Figure 15: Pakistan Public Debt (in percent)

In FY06-FY08, social and poverty connected expenses⁹ remained (5.5% of GDP) much higher than 4.5% target of 4.5%. A rising trend was observed on account of the expenditure on same account in next four years (FY09-FY12). The same expenditure to GDP increased from 6% in FY09 to 8.2% in FY12. Health and education are the two core elements in nation development. The government of Pakistan had realized the importance of this issue and setting the expenditure (as percent of GDP) target of health & education to double in the next ten years. In actual, health & education expenditure practically remained constant with less than 1% on education and around 2% on health during FY03-FY13 (see Figure 16).

⁹ Social and poverty related expenses such as highways, law & order, social security, water supply, road & bridges, education, irrigation, natural calamities, sanitation rural development, land reclamation, food subsidies, village electrification, population planning, and food support programs.

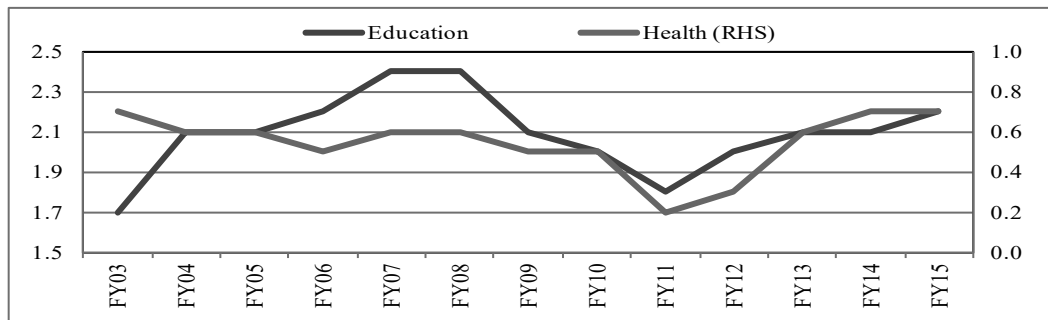


Figure 16: Expenditure on Health and Education (as percent of GDP)

3. “Reduce revenue deficit to nil not later than the 30 June, 2008, and thereafter maintaining a revenue surplus. Revenue deficit means the difference between total current expenditure and total revenue of the government which indicates increase in liabilities of government without corresponding increase in assets of government.”

Total revenue balances mounted at Rs.-70.9 billion in FY03 (the first year of FRDL) with 1.5% as GDP ratio. In FY04, revenue balances took a U-turn and changed into surplus of Rs. 19.0 billion and continued the uprising trend upto FY06 as surplus of Rs.41.9 billion (see Figure-17). Revenue balances took another turn and changed into deficits with the amount of Rs.77.4 billion in FY07. Revenue deficit reached to Rs.353.8 billion in FY08, considerably 357.1 percent more than the revenue deficit of FY07. This is another condition of FRDL Act 2005 which was not met within specified time period (June 30, 2008). Revenue balances remained in deficits during FY07-FY12 and reached Rs.556.0 billion mainly due to significant growth of current expenditure on account of notable rise in debt servicing payments-domestic and external (interest payment), surge in defence expenditure, consecutively increase in government employees’ salaries and increase in pension bill over the last few years,

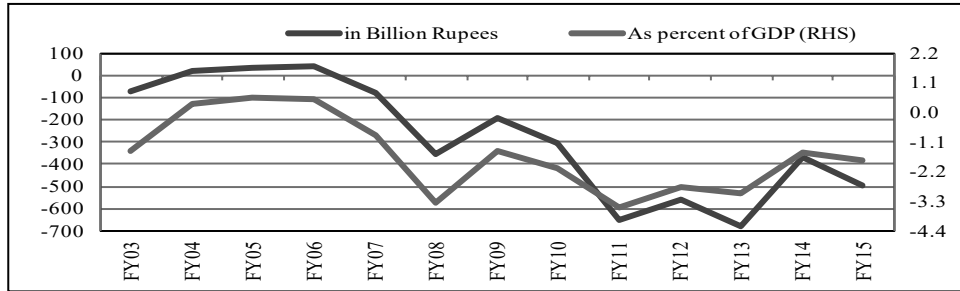


Figure 17: Pakistan Revenue Balances

4. “Not issue new guarantee, including those for output purchase agreements, bonds, rupee lending, rates of return, and all other claims and commitments that may be prescribed from time to time, for any amount exceeding 2.0 percent of the estimated GDP in any financial year: provided that the renewal of existing guarantees shall be considered as issuing a new guarantee.”



Figure 18: Pakistan New Guarantees Issued

Government of Pakistan remained within the required limit of issued new guarantees of 2% of GDP in almost all fiscal years (FY06-FY15) except for FY09 (see Figure-18). In FY06, Rs.14.0 billion new guarantees (0.2% of GDP) were issued for K-Electric, WAPDA, and PIA. Government has issued new guarantees (comprise of explicit/implicit guarantees issued to public sector enterprises and “state owned entities” unfunded losses) amounted Rs. 274.3 billion (2.2% of GDP), which was higher than the FRDL Act limit (2%). In FY15, Pakistan has issued new guarantees of Rs.156 billion or 0.6% of GDP. The major portion of these guarantees was issued to Power Holding private Limited (PHPL) and PIA having 99.3 percent share in total guarantees in FY15.

Summary and Conclusions

Rising trend was observed in the volume of the Pakistan total debt and liabilities during the last three and half decades. In recent years, Pakistan debt has increased to extraordinary levels of Rs 19.75 trillion at the end of FY15 compared with Rs. 5.05 trillion during FY07. Pakistan's debt rose by 293.3% during FY07-FY15. Pakistan total debt and liabilities to GDP ratio enhanced to 72.6% of GDP in FY15 against 54.6% in FY07. As a result, per capita debt burden jumped to Rs. 104530 in FY15 as against Rs.31308 in FY07 and average household family burden rose by more than double during this period.

Pakistan total debt comprising domestic debt and external debt have different implications on macroeconomic situation of Pakistan through current expenditure, development expenditure, fiscal gap, exchange rate movements as translational loss/gain, and balance of payments. Pakistan external debt augmented by US\$ 24.8 billion during FY07 to FY15 time period, of which around 25 percent rise was due to the movement of the major currencies against US dollar (base currency).

Pakistan government has made efforts to reduce the debt burden. On June 13, 2005 Government of Pakistan promulgated the FRDL to reduce the government debt to a prudent level and elimination of revenue deficit with effective debt management. The government has breached the FRDL Act 2005 for the fifth consecutive years. The current account deficits, fiscal deficits, higher subsidies, lower revenues, double digit inflation, drying up of external program loans, transfer of the 70% federal government collection to the provinces under the 7th National Finance Commission (NFC) Award, undeveloped domestic debt market and currency devaluations were the major factors for the violation of the FRDL Act 2005. As far as to double the budgetary allocation to education and health in the next ten years is concerned, it's almost remained constant with less than one percent on education and around two percent on health during FY03-FY15.

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IMPACT OF REWARDS AND FULL RANGE LEADERSHIP STYLES ON KNOWLEDGE MANAGEMENT PRACTICES

Ayesha Nazish¹, Sofia Aslam² and Yasir Aftab Farooqi³

Abstract

This research is intended to investigate the influence of reward system and full range leadership style on knowledge creation, sharing and application in the education sector of Pakistan. By using cross sectional research design, questionnaires were distributed to collect data from teachers. Findings have been drawn by using AMOS, which indicated positive impact of intrinsic rewards and transformational leadership style on knowledge creation, sharing and application. However, no significant linkage of extrinsic rewards was found with knowledge creation, sharing and application. Additionally, contrary to expectations, transactional leadership found to have negative effect on knowledge creation and sharing, but it positively affects knowledge application. However, the model of this research can be used as a source to get competitive edge by creating new knowledge, sharing and applying it effectively.

Keywords: Rewards System, Knowledge Creation, Knowledge Sharing, Knowledge Application, Education Sector.

JEL Classification: Z000

Introduction

According to Nonaka and Takeuchi (1995) study of 'human knowledge' is as old as history of human being itself, but it gain prominence as a research topic since 1990 (Krogh et al., 2000). Today's business and education systems are interested to know that how information can be collected, disseminated and shared among individuals more effectively, even in the presence of increased internal and external demands of accountability; requirement of improved education, combined with

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the demand on the time of teachers (Petrides & Nodine, 2003). As, we have seen that today's business leaders consider knowledge as chief asset for organization which can serve as a key to sustainable competitive advantage (Davenport & Prusak, 2000). Therefore, leaders can serve as the main drivers of knowledge management practices in an organization who create an environment of knowledge sharing by incorporating their own knowledge in an organization's pool of knowledge (DeLong & Fahey, 2000). Another key challenge for KM in educational institutions is to ensure that employees continually learn new knowledge, share it with others as well as apply it for the effective functioning of an organization (Carroll et al., 2011). For this reason rewards are important source of motivation to learn new knowledge as well as the share it with others (Bartol & Srivastava, 2002; Jahani et al., 2011).

Despite the widespread acceptance of reward system, leadership style and knowledge management practices, the current level of knowledge management, rewards system and leadership style is known in a miniature within the education sector of Pakistan. There are very few researches which investigate leadership behavior or styles needed to enhance the extent of knowledge management practices in organizational settings (i.e. Crawford, 2005; Noruzy et al., 2013; Nguyen & Mohamed, 2009; Singh, 2008; and Tombul, 2011). However, with the exception of the research conducted by Crawford (2005), the scope of the above mentioned researches were limited towards specific areas or practices of knowledge management. These researches did not investigate knowledge management as a holistic process that involves knowledge creation, sharing, and application. Although we found many researches on different aspects of knowledge management, but no such attention has been given towards the relationship of leadership styles (transformational and transactional) with knowledge management (Gelard et al., 2014). Therefore, this study was proposed to check the effect of transformational and transactional leadership styles with knowledge creation, sharing, and application. In addition to a gap of literature between full range leadership styles and practices of knowledge management, relationship between reward system and practices of knowledge management is also at its initial stages. For example, the theoretical framework has been developed recently regarding the reward system for enhancing knowledge sharing (Sajeva, 2014). Sajeva (2014) stated that while researching on knowledge sharing, intrinsic and extrinsic rewards are important to be explored for knowledge sharing. Hence, this study filled a gap by empirically testing a relationship between rewards (intrinsic and extrinsic) and full range leadership styles (Transformational & Transactional) with individual level practices of knowledge management (creation, sharing and application) in education sector of Pakistan. But unfortunately, there is lack of significant leadership role in educational sector of Pakistan, as well as, learning is also at the bottom quartile according to it benchmarks' scores (Hafeez et al., 2013). However it is proved empirally that if knowledge framework is applied properly in academia, then it will increase overall learning practices which also contributes towards the enhancement in quality practices (Zaki & Zubairi, 2012). Therefore, this study has adopted education sector, in order to provide a framework which can improve the situation and make education sector more worthwhile and competitive.

Research Objective

This research is intended to investigate the relationship of the rewards (extrinsic & intrinsic) and leadership styles (transformational & transactional) with individual's knowledge management practices (creation, sharing & application).

Literature Review

Knowledge Management

According to Educational KM website (2010), knowledge management is defined as an efficient management of knowledge assets in order to create value. KM basically consists of the processes, initiatives, systems and strategies that maintain and increase the storage, appraisal, sharing, improvement, and creation of the knowledge (Oxford Dictionary, 2015). For organizations in the global competitive environment, knowledge creation, sharing, and application are important activities (Davenport & Prusak, 2000). A Taiwanese scholar, Chen (2014), states that in knowledge society, teacher is professional knowledge worker, who helps in transference, creation, and learning of knowledge. KM has following three components:

Knowledge Creation

Knowledge creation refers to “the activities through which an individual synthesizes existing knowledge to develop new ideas” (Nonaka, 1994; Nevis et al., 1995; Muhammed et al., 2011).

Knowledge Sharing

Knowledge sharing is a process in which knowledge of one individual is transferred to other people in an understandable form which can be used and absorbed by other individuals (Ipe, 2003). Whereas, according to Muhammed et al. (2011) knowledge sharing is done with the help of system documentation by simply exchanging ideas with one another. It specifically entails activities or behaviors involving the transmission of knowledge from one individual to another (Jalal, Toulson, & Tweed, 2010).

Knowledge Application

Knowledge application refers to “the actual utilization of knowledge for productive purposes” (Muhammed et al., 2011). Also, knowledge application is defined in terms of available knowledge which is used or applied at the time of decision making and task performance (Becerra-Fernandez & Sabherwal, 2010).

Reward System

Reward is defined as anything that can reinforce, maintain and strengthen the behavior of individuals in an organization (DeCenzo & Robbins, 2013). According to self-determination theory of motivation (Deci & Ryan, 1985), reward can also be classified into two types like extrinsic and intrinsic rewards (Mottaz, 1985; Mahaney & Lederer, 2006).

Reward System and Knowledge Management

There are many knowledge management enablers which effect the level of knowledge management practices such as, collaboration, mutual trust, incentives/rewards and leadership (Gan et al., 2006). Individual-based reward system is in favor of firm because it encourages workers to share their knowledge (Amayah & Nelson, 2010). Moreover, lack of reward is found to be most dominant hurdle for knowledge sharing among employees in public sector universities (Zawawi et al., 2011). Pee (2012) found that extrinsic rewards created weaker effect as compared to intrinsic rewards on employee's behavior to contribute their knowledge. Additionally, it was confirmed that behaviors of academicians can be varied to share knowledge, because of established reward system (especially intrinsic rewards) and leadership styles prevailing in an organization (Jahani et al., 2011). In short, knowledge sharing behavior of individuals should be recognized and rewarded as well (O'Dell & Hubert, 2011; Wickramasinghe & Widyaratne, 2012). However, if extrinsic motivation is combined with intrinsic motivation in a synergistic way then it can also leads towards the enhancement in the creativity of people, as well as, promote the application of technical knowledge (Amabile, 1993). Consistently, Charoengam and Teerajetgul (2006) found that incentives and rewards are significant predictors of knowledge creation (Berraies & Chaher, 2014). It was also found that formal reward system of an organization leads towards the increase of knowledge application (Song et al., 2005). Summarizing, it can be said that reward and incentive system are said to be the valuable tool for engaging employees in knowledge management activities (Lawler, 2013). Therefore it is expected that;

H1: Intrinsic rewards positively influence knowledge creation (H1a), knowledge sharing (H1b), and knowledge application (H1c).

H2: Extrinsic rewards positively influence knowledge creation (H2a), knowledge sharing (H2b), and knowledge application (H2c).

Full range leadership model

Interest in leadership started increasing from the beginning of twentieth century which leads to the evolution of many leadership theories starting from Great Man approach to full range leadership including two styles i.e. transformational leadership and transactional leadership (Cherry, 2012).

Leadership Styles and Knowledge Management

Noruzi et al. (2013) found a direct link between transformational leadership, organizational learning and knowledge management. Nguyen and Mohamed (2009) also found a positive association of transactional and transformational leadership styles (full range leadership model) with knowledge management practices in SME of Turkey. However, research by Crawford (2005) found that transformational leadership style is a strong contributor of knowledge management while the transactional behavior is related to KM only to some extent.

Berraies and Chaher (2014) suggested that organizations can enhance the level of knowledge creation by their human capital, only by having manager who practice best leadership style and have ability to engage employees around a common goal of knowledge creation (Berraies & Chaher, 2014). Initially the leadership in relation to knowledge creation was identified by Nonaka et al. (2001), who stated that “leaders provide the knowledge vision, develop and promote sharing of knowledge assets, create and energise and enable and promote the continuous spiral of knowledge creation”. Later on, Krogh et al. (2012) and Kumar et al. (2013) develop theoretical framework that identify role of leadership for enhancing knowledge creation processes. They argue that ‘establishment of the relationship between leadership styles and knowledge creation is important, because it will help to recognize those leadership activities that promote and enhance the knowledge creation. It will ultimately help organizations to gain competitive edge’. Not only knowledge creation is effected by the role of leader, but it can be noted that knowledge sharing ability of employees is also affected by the leadership styles (Carmeli et al., 2011; Huang et al., 2010). It is important for institutions to share knowledge and to do this; it needs involvement of the leaders (French, 2010). Leaders support greater knowledge sharing so that human resources can develop inspired problem-solving capacity (Abraham, et al., 2013). Tombul (2011) also analyzed the effect of knowledge sharing and leadership styles on police officers performance and supported the relationship between knowledge sharing and perceived transactional and transformational leadership behaviors. But he also stated that knowledge sharing activities were not influenced by other leadership style i.e. laissez-fair. However, Birasnav et al. (2011) suggested that HR managers need to be trained in order to develop behavior of a transformational leader because of the fact that these leaders enhance the level of their followers’ creativity and have the greatest potential to involve them in the KM process. Lastly, it was found that management style and position of a team leader have great influence on the learning, as well as, on the application of knowledge (Sarin & McDermott, 2003). Overall, literature provides a support for the relationship between full range leadership styles and dimensions of knowledge management (Analoui et al., 2013). Therefore it is expected that:

H3: Transformational leadership style positively influences knowledge creation (H3a), knowledge sharing (H3b), and knowledge application (H3c).

H4: Transactional leadership style positively influences knowledge creation (H4a), knowledge sharing (H4b), and knowledge application (H4c).

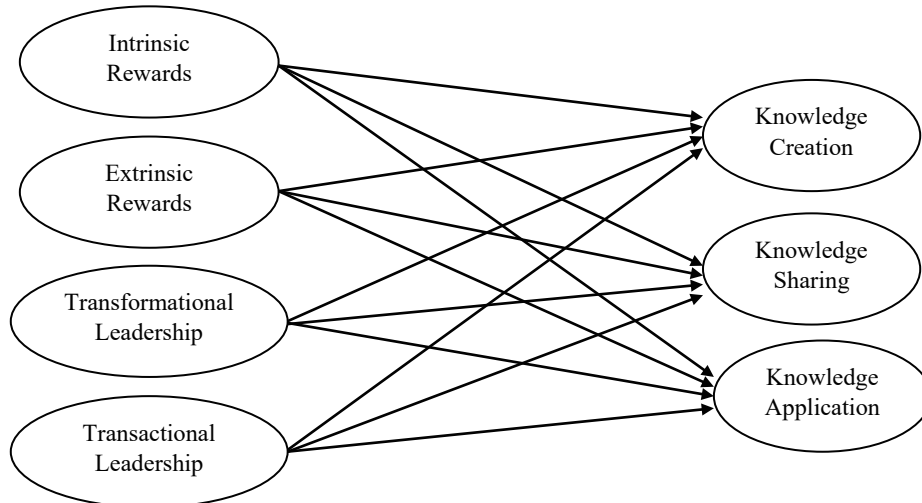


Figure 1: Model of study

Methodology

Sampling

The unit of analysis for this study includes teachers as they are the players in of knowledge creation in any organization (Nonaka & Takeuchi, 1995). Due to unavailability of updated sampling frame, the sample size was drawn with the help of the technique of analysis i.e. SEM. So, for applying SEM, the total number of items was multiplied by ten (Munro, 2012).

Sample Size = $48 \times 10 = 480$

To draw sample, targeted population of Punjab was divided into 9 clusters according to its divisions. One cluster was chosen from those 9 clusters through simple random sampling. The selected cluster (Gujranwala) was further divided into 6 sub-clusters on the basis of districts. Those districts were further divided into strata's according to the branches of colleges. In order to get 480 respondents, 32 colleges were selected randomly from the list of colleges (Higher Education Department, 2014).

Measures

The measuring instrument i.e. questionnaire designed in two parts. Section-A was designed to ask about the demographic information from the respondents. Demographic information included age, gender, and marital status, level of their education, salary and teaching experience. Section B was designed to measure the impact of rewards and leadership styles on individual's knowledge manage-

ment practices. To measure intrinsic and extrinsic rewards, we adopted already used scale of Mottaz (1985). This well calibrated scale has also been used in various good indexed studies e.g. used by Rehman et al. (2010). The scale for two styles of leadership i.e. transformational and transactional leadership style was adopted from “Multifactor Leadership Questionnaire-5X Short Form” (Bass & Avolio, 1997). This scale was also used in various good indexed studies such as in the study of Analoui et al. (2013), Birasnav et al. (2011), Huang et al. (2010) and Tombul (2011) etc. Lastly, well calibrated scale for measuring individual’s knowledge management practices was adopted from Muhammed et al. (2011).

Data Analysis

Demographics

Demographic profile of respondents showed most of the respondents were in the age bracket of 21-30 (208 respondents out of 342) and 31 to 40 (110 respondents). However very few respondents were above 50. We found 51 percent female lecturers and 48.8 percent males in sector of study. Most of the respondents 158 (46.2 Percent) had master’s degree and 134 (39.2 Percent) had MS/ M.Phil degree but only 5 (1.5 Percent) respondents had done Ph.D. The salary bracket of 10,001-30,000 was found biggest one (150 respondents). However the second largest salary bracket was 30,001-50,000 (121 respondents). Very few respondents were earning below 10,000 (22 respondents) and above 70,000 (23 respondents). Lastly average job experience of 342 respondents was almost 5 years (5.05 years) with standard deviation of 5.436.

Measurement Model

The measurement model is based on the evaluations of reliability and validity of the measures. Reliability was checked by cronbach’s alpha. Value for all variables ranges from 0.751 to 0.872 showing that each measure is reliable as the cutoff value of cronbach’s alpha for a reliable construct is considered to be 0.7 according to Chin (1998) cited by Bock et al. (2005). Construct validity including convergent and discriminant validity was also checked. For this study, each latent variable have factor loading values greater than the cut-off point and is therefore considered to be confirmed factor showing the convergent validity of constructs used in the research. Moreover, the correlation between factors of this study was also not excessively high and exhibiting discriminant validity.

Structural Model

Model Fitness Index

Fitness of the model was assessed by evaluating it with the variety of indices or criterions

(see table 1). These criterions indicate that hypothesized relationships in the model under study are good enough to be accepted for its further analysis.

Table 1
Goodness of Fit Indices

	X ²	d.f	X ² /d.f	CFI	GFI	NFI	RMSEA	RMR
Model Values	266.5	110	2.42	0.951	0.910	0.916	0.081	0.057
Recommended			≤3	≥0.9	≥0.9	≥0.9	≤0.08	≥0.05

Hypothetical Analysis

For the testification of the hypothesis, structure equation modeling technique was used. Path coefficients of SEM technique are reported in figure 2. Intrinsic rewards are found to have significant positive relationship with knowledge creation ($\beta = .061$, $t = 4.206$, $P = 0.000$), knowledge sharing ($\beta = .065$, $t = 4.456$, $P = 0.000$) and knowledge application ($\beta = .065$, $t = 4.352$, $P = 0.000$). Thus providing support for the hypotheses H1a, H1b and H1c. Interestingly, the results indicated that extrinsic rewards have no significant relationship with any dimension of individual's knowledge management practices i.e. with knowledge creation ($\beta = .004$, $t = .199$, $P = 0.842$), knowledge sharing ($\beta = .041$, $t = 1.917$, $P = 0.055$) and knowledge application ($\beta = .017$, $t = .764$, $P = 0.445$). Therefore, H2a, H2b and H2c hypotheses does not found support in this study. As expected, transformational leadership found to have significant positive relationship with all dimensions of individual's knowledge management practices i.e. with knowledge creation ($\beta = .233$, $t = 19.536$, $P = 0.000$), knowledge sharing ($\beta = .189$, $t = 15.606$, $P = 0.000$) and knowledge application ($\beta = .133$, $t = 10.759$, $P = 0.000$). Thus providing support for the hypotheses H3a, H3b and H3c. But contrary to expectations, we found significant negative relationship between transactional leadership and two dimensions of individual's knowledge management practices i.e. with knowledge creation ($\beta = -.053$, $t = -2.379$, $P = 0.017$) and knowledge sharing ($\beta = -.058$, $t = -2.556$, $P = 0.011$). However, transactional leadership has significant positive effect on knowledge application ($\beta = .082$, $t = 3.583$, $P = 0.000$). These results provide support for H4c and reject H4a and H4b hypotheses of this research. Following figure exhibits the path coefficients of the research model which indicated the strength of the relationship between constructs.

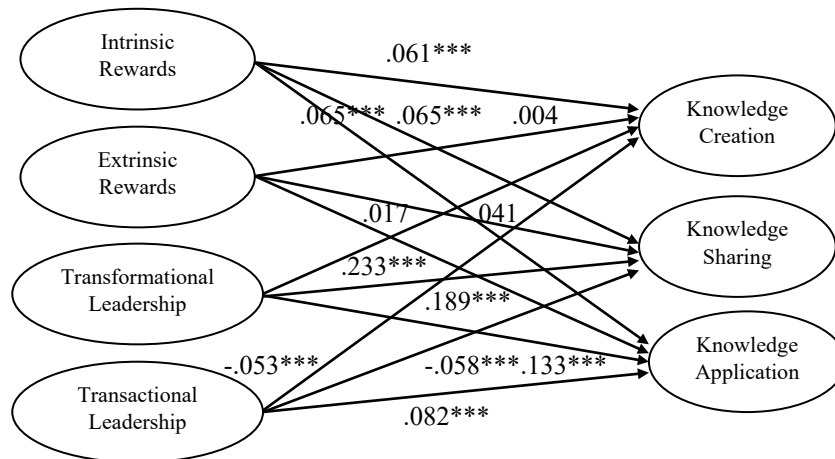


Figure 2: Hypotheses Testing: Full Model (N = 342)

Discussion and Conclusion

The structural relationship of reward system and full range leadership styles with individual knowledge management practices (creation, sharing & application) was analyzed. Findings of this study proposed that a knowledge management practices in an organization is a function of several different aspects, such as leadership styles, and reward system. The findings supported that intrinsic rewards have significant positive relationship with individual’s KMP (i.e. creation, sharing and application) in an organization. However, extrinsic rewards were found to have no significant relationship with individual’s knowledge management practices i.e. creation, sharing and application of knowledge.

Literature provides strong evidence for the relationship of both types of rewards with individual’s knowledge management practices (Bartol & Srivastava, 2002; Berraies & Chaher, 2014). This study also found consistent results with these researches for the relationship between intrinsic rewards and knowledge creation, sharing and application; but we found contrary results for extrinsic rewards. However, these contrary results found support from the latest study conducted by Jahani et al. (2013), who proved that extrinsic rewards does not significantly predict knowledge sharing behavior. There are some other studies which also provide evidence that rewards have insignificant relationship with employee’s attitudes towards knowledge sharing (KS) (Seba et al., 2012). It was also suggested that it may be time to revise the motivation theory as a basis for research in KS (Seba et al., 2012). However, this research extended the findings of previous studies by explaining that not only knowledge sharing but knowledge creation and its application are also not affected in the presence of extrinsic rewards within an institution. It is because, financial rewards could only create short-term

effect rather than having long term effects (Huysman & de-Wit, 2002). Hence, in reality knowledge sharing is considered as an essential responsibility by more experienced employees and considered as a part of their work. Thus, they hold a negative perception about the usage of extrinsic rewards for encouraging knowledge sharing behavior among them (constant et al., 1994). The presence of extrinsic rewards can attract only non-intrinsically motivated employee to encourage them for sharing their knowledge (Davenport et al., 2003). Same is the case with knowledge creation and application by employees. Teachers are mostly motivated intrinsically now-a-days (Menyhart, 2008) and did not see extrinsic rewards as an important source of motivation. Another significant contribution of this research study is in the theoretical explanation of intrinsic rewards construct. It is because; intrinsic rewards have operationally defined in terms of; a) task autonomy; b) task significance and; c) task involvement, which can serve as motivators for knowledge creation, knowledge sharing and knowledge application by teachers. Through this, we came to know that intrinsic rewards are important in enhancing knowledge management practices and this can lead to better perception regarding how to create effective reward and recognition systems in an organization for knowledge workers.

Another finding of this study relevant to full range leadership style proves that transformation leadership is a significant contributor in development of knowledge management practices i.e. knowledge creation, sharing and its application. This finding is significant with Berraies and Chaher (2014), Birasnav et al. (2011), Sarin and McDermott (2003) and Tombul (2011). However, Contrary to expectations, transactional leadership has significant negative impact on knowledge creation and sharing but positively affects knowledge application. This can find its support from the study of Crawford (2005) who found that transformational leadership style is a stronger predictor of knowledge management practices than transactional behavior. Crawford (2005) found significant negative correlation between knowledge management practices and management by exception (component of transactional leadership). Moreover, he also did not found support for the overall relationship between knowledge management and transactional leadership. By giving these interesting and conflicting findings, he asked other researchers for further investigation into the relationship. Hence, these finding are extending in this present research by explaining that teachers are not finding any motivation from the transactional behavior of their leaders to create new knowledge or share their knowledge with others. It may be due to the fact that they consciously hoard their knowledge in order to get more rewards from their leader than other employees working in same institution or they may have fear that sharing may reduce or jeopardize their job security. And this fear is not eliminated with the help of transactional behavior of leaders. However, it may be possible that employees use their existing knowledge and apply it in order to make their position better in institution. Therefore, transactional leadership found positive relationship with knowledge application. As we know that transactional leaders exercise their power in order to gain benefits, whereas, followers of these leaders only give performance in exchange of the rewards they receive for their needs (Flood et al., 2000). In short, we found that people are motivated intrinsically and prefer transformational leadership style. Hence, it is proven that intrinsically motivated individuals and followers of transformational leaders plays greater role in enhancing the knowledge management practices i.e. knowledge creation, knowledge sharing and knowledge application.

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LINKING THE PROJECT SCOPE WITH PROJECT SUCCESS: THE MODERATING ROLE OF MANAGERIAL EXPERTISE IN IT

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Abstract

This study aims to reveal the effect of formal definition of project scope on project success. Furthermore, it also intends to examine the moderating effect of managerial expertise in information technology on the above stated relationship. The study followed a cross sectional research design, purposive sampling technique, and self-administered questionnaires. 120 respondents are selected that are working in six information technology based organizations. The results show a significant and positive relationship between formal definitions of project scope with project success. It also revealed that IT project manager's expertise in information technology field has a positive moderating effect on the relationship between project scope and project success. It contributes in existing knowledge of information technology in the perspective of project management. The finding may be fruitful to win the game from the competitors. It also explores the new insights for researchers, practitioners, and consultants of project management. The moderating effect of managerial expertise in IT is unique addition to research.

Keywords: Project, Scope, Moderating Role, Managerial Expertise.

JEL Classification: Z000

Introduction

The firms while entering the international competitive markets have to keep watching the market demand and scenario of supplies from their international compatriots, the most daunting and challenging task in nature they face. Competitive positioning of a firm is not confined to a firm's indigenous capacities but linked with a firm's association with fellow organizations as well. Based on these, it was concluded that in the wake of diversity of economies, in future the competition will not be among

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companies but would be due to difference in managerial expertise. This study aims to unpack the direct effect of project scope on project success. Projects are temporary and unique in nature and are initiated to accomplish some specific objective or goal (Turner & Müller, 2003). This is evident from the fact that in South Africa only 35% projects were completed successfully, 46% were challenged and caused over cost (Emam & Koru, 2008). Lower level of employee involvement in decision making, lower level of managerial expertise, and poor project planning can enhance the chances of project failure rates across the world (Verner et al., 2008).

For the last two decades, the paradigm of knowledge is transformed from traditional way to innovative way (Muqadas, Ilyas, & Aslam, 2016; Chien & Tsai, 2012). Organizations are continuously involved in exploring new avenues for gaining knowledge that is beneficial for better performance (Blackler, 1995). The acquiring of knowledge is a continuous and ongoing process through which employees gain new and updated knowledge to deal with organizational issues effectively (Muqadas et al., 2017; Zack, McKeen, & Singh, 2009). The increasing trend of business uncertainty demands creativity, innovation, competitive advantage and sustained performance for existence and progress of organizations. Extant literature suggests two key drivers to insure performance; innovation and competitive advantage (Duchek, 2015; Meihami & Meihami, 2014; Vargas, 2015; Wang & Wang, 2012; Xu, Houssin, Caillaud, & Gardoni, 2011). To speed-up the innovation process and ensuring the sustained competitive advantage, employees' creativity has to be flourished in organizations (Zhang & Bartol, 2010). High level of managerial expertise has gotten the attraction of researchers' side because of its significance to generate organizational outcomes such as effectiveness, innovation, reputation, competitive advantage and performance (Cheung & Wong, 2011; Dewett, 2006; Gong, Huang, & Farh, 2009; Aslam et al., 2015; Aslam et al., 2016; Muqadas et al., 2017; Yin, et al., 2014; Zhang & Bartol, 2010). To promote these organizational outcomes, effective and updated knowledge emerges as the key to success. Innovation in information technology has redefined how work can be done and complete smoothly and effectively (Reyck et al., 2005; Muqadas et al., 2016). At present, the success of information technology projects is not satisfactory. Recent studies have shown that the overall success rate of information technology projects is very low because whenever a project moves to agile development stage, most of the time project managers are not considered into the project development phases, which results in the failure of most of the IT projects (Reyck et al., 2005; Emam & Koru, 2008; Verner et al., 2008). For the success of information technology projects a project manager plays a vital role along with other departments.

The purpose of this research is to highlight the major hurdles in the success of IT projects, their impact on IT industry as well as a project manager's role in revising the failure probabilities into success stories. Most organizations are facing this real problem of challenges of delivering increased number of projects, while they are failing in so, causing huge projects failures. If success percentages of these categories of information technology projects are considered, results are not better as expected. Most organizations are running through software applications and there are moderate chances that it fails, in fact huge amount is paid for these failures; during the last few years only in USA the

incurred cost of failed information technology projects was an estimated \$75 billion.

Literature Review

Creative behavior of employees and managers need flexibility and autonomy to generate ideas, arranging resources and effective implementation of these ideas to accelerate innovative ability (Muqadas et al., 2017; Rahman et al., 2017). Recently, an IT project can be defined as “A new or enhanced technology, software or IT services” (Khanam et al., 2016). Project management discipline has touched maturity line in the last decade but it is somewhat low in IT project management. As IT project management is a crucial issue for organizations today because failure rate of IT projects is outstanding (Whittaker, 1999). For the last two decades investment in IT projects has been gotten high day by day but the performance of IT projects is not satisfactory with respect to cost and schedule (Turner, 2009).

Investment in project played an important role to boost demand and employment, economic growth, and country prosperity. Project initiatives and project success is based on knowledge regarding facts and creativity of project managers and project team players. At the core of knowledge base view organizing is the conception of organizational entities such as project team as vehicles for integrating tacit and explicit knowledge that is distributed among many individuals (Grant, 1996). In every project, good managers play their positive role in its success. There is general agreement that a project's success or failure hinges on the abilities of the project manager (Gillard, 2009; Rahman et al., 2017). There is also agreement among researchers that the technical expertise of the project manager in relevant field is of paramount importance for success (Derus & Abdul-Aziz, 2016; Hodgson & Paton, 2016; Rehman et al., 2016; Kayworth & Leidner, 2000). It is suggested that interpersonal or soft skills are the primary determinant of success (Dinsmore & Cabanis-Brewin, 2006; Need, 2007; Pant & Baroudi, 2008) but at the same time it is also observed that both technical background and leadership skills are necessary for project management success (Gillard, 2009). Authors such as Baca (2007) argues engineers who are pressed into the role of project managers often focus on technical issues and became successful most of the time.

H1: Formal definition of scope has significant and positive impact on project success.

H2: Project manager's technical expertise moderates the relationship between formal definition of scope and project success.

Research Methodology

A field survey was conducted to test the hypothesized relationships. Data were collected from project team members. The respondents include multiple members from each project teams working in information technology projects in Pakistan. This approach was appropriate for the study, because the objective was to empirically test the proposed model.

Research Philosophy and Approach

Positivism expresses that the objective methods can be used to measure the external existence of social world, rather than making subjective derivations by the use of instinct or sensation, (Aslam et al., 2015; Aslam et al., 2016). This statement comprises of two assumptions. First is epistemological that knowledge is made significant only by observing the external reality. Second is Ontological that the truth is both external and objective; which is the result of empirical verification (Burns & Burns, 2008). This study follows the assumptions of positivism approach with the purpose to analyze the reality scientifically and objectively. Furthermore, the basis of this research developed based on existing literature and deductive reasoning so it can categorize as positivistic research paradigm. By following positivistic paradigm and deductive reasoning approach assumptions, I have constructed several hypotheses for testing in specific settings. Recently this approach is also highlighted by Aslam et al. (2016) for its usability in cross sectional explanatory and temporal studies. In the current study positivistic approach is used as recommended by Ponterotto (2005) with help of adequate literature on social sciences.

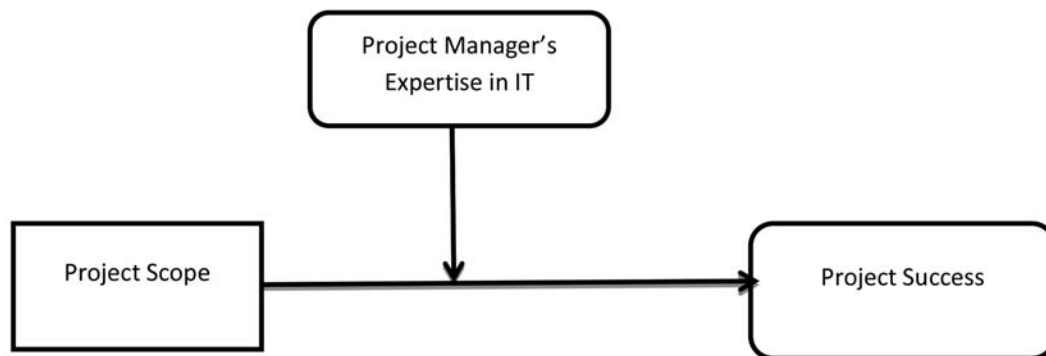


Figure 1: The Research Model

Research Design

This research aims to examine the cause and effect relationship between formally defined project scope and project success in IT firms in a developing country context. “Pakistan Software Export Board (PSEB) is an apex Government body mandated to promote Pakistan's IT Industry in local and international markets. PSEB facilitates the IT industry through a series of projects and programs (Source: www.pseb.org.pk)”. Top 10 IT exporting companies which received PSEB IT Award 2016 are selected for this study. A total sample of 135 is calculated by WHO manual with 80% power of test and 95% confidence level with expected satisfactory performance to be 92.3%. Questionnaires were distributed randomly to 135 respondents. Only 123 questionnaires were collected back after repeated e-mails. Due to omissions 3 questionnaires were rejected. Final results are

supported by 120 questionnaires.

Data Analysis Tools

Various well accepted and recognized statistical tests have been used for data analysis purpose. There are various statistical techniques that were used to find out the results. For example, reliability and validity tests were performed to measure the internal consistency and construct validity of scales. Whereas linear regression, and Aguinis (2004) multiple moderation regression (MMR) tests were used to examine the relationships in proposed hypotheses.

Measures

Aslam et al. (2016) described self-administered questionnaires as the best data collection tool, as self-administered questionnaires can be helpful in collecting data at low cost. Multi items self-administered questionnaire are adopted for this study. Project scope definition is measured on the basis of scale developed by Marnewick and Labuschagne (2009). The 21 items scale is adopted for this study. Project success is measured with the help of 8 item adopted and adapted scales from the work of Componation et al. (2008). Project manager's expertise in IT is measured by using previous study scale of Zenger et al. (2011).

Results and Analysis

The study is conducted in information technology sector in the context of a developing country context. There were 80 male who make 66.7% of the sample size. There were 40 female, who comprises 33.3% of the total number of the respondents. The key respondents of the study are IT experts who are directly involved in IT project development process of the selected companies.

The sample consists of 25 project managers, while rest of the sample size made-up by other team members who are directly involved in project development. Project manager's experience in said field and job tenure in current organization are two critical factors which really matter in project success and in identification of expertise level. There are 39 respondents with 1-5 years of experience, 56 with 6-10 year experience while 25 respondents claim that they have 11 year or above experience in information technology project development. All of the respondents having a master's or equal degree in computer sciences. While there were 37 respondents having 2nd degree of master's in project management.

Reliability Analysis

The scale reliability is tested using Cronbach (1951) and reliability of the all constructs is > 0.07, which is acceptable according to (Bland & Altman, 1997).

Validity Analysis

As we discussed earlier, all scales for this study are adopted from well-known studies and modified after counseling with the IT experts. Hence its worthy to conduct a factor analysis to find out the covergetn and constructs validity using recommendation of a previous study (Clark & Watson, 1995). Initially, factor analysis is done and loaded all 21 items, same as factor 2 and factor3 loaded all 8 and 8 items for project success and technical expertise respectively. Kaiser-Meyer-Olkin (KMO) and Bartlett's test results were also appropriate and acceptable.

Descriptive Statistics

The mean value of the data set highlighted a positive trend and standard deviation is near to 1 that is acceptable (Muqadas et al., 2016). It is also observed that Pearson coefficient of correlation was found to be low to strong correlation among variables of the study.

Table 1
Descriptive Statistics and Correlations

	Variable Description	Mean	S.D	1	2	3
1	Project Scope Definition	4.7761	1.12			
2	Project Success	4.8434	0.99	.684**		
3	Technical Expertise	4.683	1.05	.112	.173	.225

Hypothesis Results

In testing, level 1 model examine the relationship project scope definition and project success while level 2 model examine the moderating influence of project manager's expertise in IT on project scope definition and project success. Hypothesis H1 is supposed that "Formal definition of scope has significant and positive impact on project success". It is found that formal definition of project scope has significant positive impact on project success, the model significance value is $p < 0.05$ and the R2 value shows that there was 46.8% variation can be explained in project success due to formal definition of project scope. Furthermore ANOVA test is also significant having an F value 218.250. Hypothesis H2 predicted that project manager's expertise in IT would moderate the relationship between formal definition of project scope and project success. The moderating effect measured by following the famous study guidelines (Aguinis, 2004). At step 1 the direct effect of formal definition of scope on project success is tested and found to be significant ($\beta=.664$, $t=14.773$, $p < 0.05$). After comparing the results of Model 1 and model 2, the results reflect a moderation effect of managerial

expertise in IT on relationship between formal definition of project scope and project success. Project manager's expertise in IT strengthens the existing relationship between formal definition of project scope and project success. The overall model is significant. "R Square Change", shows the increase in variation explained by the addition of the interaction term. Change in R2 is reported as .035. We can say 3.5% increased variation can be explained by the addition of the interaction term. The increase is statistically significant ($P < 0.05$). Hence hypotheses H1 and H2 both are supported. These results are presented in table 4.

Table 2
Regression Analysis

	Dependent Variable Project Success						
	Independent Variable	B	R ²	t	F	ΔR^2	ΔF
Model 1	FDPS	.664	.468	14.773	218.250		
Model 1	FDPS*PMEI	.096	.503			.035	17.504

N= 120 FDPS= Formal Definition of Project PMEI= Project Manager's Expertise in IT $P < 0.05$

Conclusion

Innovation in information technology has redefined how work can be done and complete smoothly and effectively. But at the same time success of information technology projects is not satisfactory. Most of the time project managers are not considered into the project development phases, which results in failure of most of the projects. Project manager plays a vital role along with other departments. Detailed implementation of procedures and policies in defining and base lining the scope any IT project indicates project manager's importance in the successful completion of a project. Therefore, the importance of a project manager in any field or category cannot be overlooked, but specifically for organizations, working in the field of IT projects, an experienced project manager plays a vital role in its success. At the moment many researches are available on causes of project success and failure aspects but there is not a single research that has check the formal definition of scope, allocation of time and cost effect with respect to moderation of managerial expertise with respect to Pakistani culture and trend of management, so in this regard this study is novel. Regression analysis shows that there is a significant positive relationship (R square) between formal definition of scope and project success. Moderation analysis shows that managerial expertise in IT moderates the relationship between formal definition of scope and project success.

Recommendations and Implications

It is highly recommended that management and organization should adopt more project specific approach while working on IT projects. Organizations should adopt a formal step of project classification to the traditional planning phase. The specific project type should choose specific type leader. Organizations should adopt various methods to reduce risk; one best way is to determine it at planning phase in project scope. Organizations that want to pursue for IT related project management, can use this information in project management. Organizations that already in the arena can win the game efficiently and effectively than their competitors, by implementation of research findings.

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IMPACT OF POLITICAL INSTABILITY ON ECONOMIC GROWTH, POVERTY AND INCOME INEQUALITY

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Abstract

We study the impact of political instability on economic growth, income distribution and poverty. The estimates are obtained by applying Heteroscedasticity consistent OLS on a cross-section of 103 countries from 1984-2011. We take into account alternative dimensions of political instability: formal, informal and military coups D'Etat. Formal and informal political instability has statistically significant and positive impact on poverty and inequality. Similarly we find that direct effect of Coups D'Etat on both poverty and income inequality is insignificant, while its indirect effect (through economic growth) is significant. On the whole our study indicates political instability is detrimental to the process of economic growth, worsen income distribution and increases poverty.

Keywords: Economic Growth, Income Inequality, Poverty, Political Instability, Heteroscedasticity Consistent OLS.

JEL Classification: I390

Introduction

An emerging concept in literature relates economic growth to the instability in political regime. Political economists disagree about the definition and measurement of political instability. For the purpose of defining political instability we distinguish between its formal and informal dimensions. Formal political instability arises due to elections and constitutional changes (Campos & Karanasos, 2008). On the other hand, informal political instability originates through protests, assassinations, riots, strikes and violations (Campos & Karanasos, 2008). These formal and informal measures have been combined to define political instability. The first definition is labeled as "Social Political Instability". This is the simplest definition and it covers only informal measures of political

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instability. The second measures “Government Changes” covers a broader definition of political instability and is based on informal political instability, economic and institutional measures.

Whatever are the definitional and measurement problems, higher level of political instability is undesirable. It shortens the time span of policy makers to lead and implement optimal macroeconomic policies. Absence of coherent and consistent policies greatly reduces the government ability to response to shocks appropriately; this uncertainty cause macroeconomic misbalances such as less economic growth, inflation, poverty, and inequality etc. There exist an ample amount of literature documenting the relationship of political instability with growth, saving rate, investment, land inequality, crime rate, debt, capital and inflation (Venieris & Gupta, 1986; Ozler & Tabellini, 1991; Edwards and Tabellini, 1991; Alesina et al., 1996; Devereux & Wen, 1998; Syed & Ahmad, 2013). Less attention has been paid to empirically examine the relationship of political instability with income inequality and poverty.

Uncertainty associated with unstable political regimes may have adverse effects on the wellbeing of poor segment of society. Political instability can affect poverty in a number of ways. First, uncertainty regarding government policies reduces accumulation of human and physical capital leading to a decline in investment. This low level of domestic and foreign investment depresses faster economic growth, which in turn increases poverty (Dollar & Kraay, 2002). Second, political instability is also expected to affect income inequality and poverty through its impact on growth. Any frequent switch of government, political violence, strikes and/or revolutions may hinder the effectiveness of pro-poor policy programs. For example, it is possible that the new government, whether obtained through constitutional or non-constitutional changes, is such that it promotes pro-rich policies. The alleged government then serves its own political allies and do not promote pro-poor policies; thereby causing more inequality and poverty. Given the close linkages between political instability, growth, income inequality and poverty no efforts has been made to collectively examine these relationships.

This study makes several contributions. First, we improve on the existing literature by examining the relationship of political instability with income distribution and poverty. To this end, we use direct and indirect channels linking political instability to poverty and income inequality. Second, we contribute to the existing literature by using alternative measures of political instability. We use three broad set of measures; (i) formal political instability measures: an index of constitutional and non-constitutional measures of political instability, (ii) informal political instability: an index of measures of mass violation, and (iii) coups D'Etat.

This study answers the following key questions:

- Does political instability reduce economic growth?
- Does political instability increase income inequality and poverty?
- How close are the links from political instability to economic growth and then to poverty?
- How close are the links from political instability to economic growth and then to income inequality?

The rest of this paper is arranged as follows. In section 2, background and related work clarify how this research relates to the existing work. Section 3 formulate empirical models and explain the methodology. Section 4 defines data sources and provides some basic summary statistics. In section 5, we interpret and discuss empirical results. The last section 6 concludes.

Literature Review

There is a large amount of studies exploring the relationship between economic growth and political instability. Alesina et al. (1996) using data for 113 countries find that countries with higher degree of political instability grow slower than others. Their findings reveal that political instability is persistent in character; the occurrence of a government collapse raises the probability of future government collapses. Gurgul and Lach (2013) while studying impact of government changes in 10 CEE transitional economies also support the negative relationship of political instability with economic growth.

Some studies have explored channels through which political instability affects growth (Barro, 1991; Devereux & Wen, 1998; Aisen & Veiga, 2013). Aisen and Veiga (2013) investigate relationship between political instability and GDP growth for 169 countries from 1960 to 2004. They find that higher degree of political instability is associated with lower growth rates. This damaging effect of political instability on GDP growth is transferred through the negative effects of political instability on total factor productivity, human capital and physical capital.

Similarly, Barro (1991) finds an inverse relationship between political unrest and growth rate of GDP for a large sample of countries. He finds that political instability reduces growth and investment through its adverse effects on property rights. Moreover, Devereux and Wen (1998) developed a linear endogenous growth model where economic growth and government spending are linked to political instability. They find evidence from cross country regressions that political instability reduces growth and increases share of government in GDP.

In the same vein, Jong-A-Pin (2009) re-examines the effect of alternative dimensions of political instability on economic growth. He finds that instability of political regime depresses economic growth. He also assumed the reverse causality between these dimensions. Lower economic growth increases political instability, while, higher growth fosters stability within government.

Some studies lift up doubt on the negative relationship of political instability with economic growth. Ali (2001) explores the relationship between a variety of political instability measures, policy uncertainty and economic growth. His findings show that policy instability has a more significant effect on economic growth than political instability. Similarly, Campos and Nugent (2002) using two different measures of political instability find that the negative impact of political instability on growth is only contemporaneous. In the long run, they did not found any evidence for the negative

relationship between political instability and economic growth.

Literature describing relationship between economic growth and political instability is quite established. On the other end, literature regarding impact of political instability on income inequality and poverty is yet to be developed. The link, however, has been developed from inequality and poverty to political instability. Studies have found that income inequality and poverty is an important cause of political instability. Alesina and Perotti (1996) examine the impact of income distribution on investment through the channel of political instability. They find that income inequality cause socio-political unrest and reduce investment, and ultimately hamper growth. Muller and Seligson (1987) and Wang et al. (1993) using alternative techniques and robustness checks also confirm that income inequality has positive association with political instability.

Londregan and Poole (1990) find that poverty and lower economic growth increases the chances of coups DEtat- a measure of forced government changes (Alesina & Perotti, 1994). Likewise, Alcantar-Toledo and Venieris (2014) suggest that political instability, fiscal policy and income inequality are the major factors hindering economic growth. More importantly they confirm that lower growth and socio political instability are main causes of poverty traps. Thus, the overwhelming amount of literature suggests that political instability is inversely related with economic growth and positively with income inequality and poverty.

Empirical Model Specification And Methodology

Political instability and economic growth

The empirical model for growth is derived from Aisen and Viegas (2013):

$$Growth_i = \alpha_0 + \alpha_1 IGDPPC(log)_i + \alpha_2 PI_i + \alpha_3 Inf_i + \alpha_4 Pop_i + \alpha_5 Ethnicity_i + \alpha_6 Corruption_i + \mu_i \dots \dots \dots (1)$$

Where, *Growth* is dependent variable and is calculated as growth rate of GDP per capita. *IGDPPC (log)*, is the value of GDP per capita in 1984; it is expected to have a negative coefficient to confirm convergence effect.

Political Instability, Poverty and Income Inequality

Based on the poverty and inequality literature (Kuznets, 1955; Chong & Calderon, 2000; Dollar & Kraay, 2002; Gupta et al., 2002) we use following determinants of poverty and income inequality:

Pov is explained variable and represent number of people living in moderate poverty (less than \$2/day). *Gini* is also dependent variable and is calculated from Lorenz curve; it represents distribution of income. The regression equation is as follows: (2)

$$Pov_i = \beta_0 + \beta_1 Ipov_i + \beta_2 PI_i + \beta_3 Growth_i + \beta_4 Pop_i + \beta_5 Ethnicity_i + \beta_6 Inf_i + \epsilon_i \dots\dots\dots(2)$$

The regression equation is as follows: (3)

$$Gini_i = \gamma_0 + \gamma_1 IGini_i + \gamma_2 PI_i + \gamma_3 Growth_i + \gamma_4 Growth2_i + \gamma_5 Ethnicity_i + \gamma_6 Inf_i + \epsilon_i \dots\dots\dots(3)$$

The explanatory variable *PI* in all equations is main variable and it represent political instability index. We use three broad dimensions of political instability: (i) formal political instability measures: an index of constitutional and non-constitutional measures of political instability, (ii) informal political instability: an index of measures of mass violation, and (iii) Coups D'Etat. All measures are expected to have negative association with growth, and positive with poverty and income inequality. *Inf*, *Ethnicity*, *Pop* and *Corruption* are other covariates of growth, poverty and inequality. All these determinants are expected to have inverse relationship with growth, and positive with inequality and poverty.

Econometric Methodology

Since we are using cross country data the problem of heteroscedasticity is likely to occur. In the presence of heteroscedasticity OLS still yields unbiased estimates but they are no longer efficient. A variety of methods is available to correct heteroscedasticity. The simplest method involves transforming functional form of dependent variable or entire model (Carroll & Ruppert, 1988). This method is discouraged because it is difficult to know that which functional form is optimal. The second method is Weighted Least Square (WLS). This method corrects heteroscedasticity by weighting each observation by sum of square residuals (Greene, 2003; Gujarati, 2012). Although WLS produce efficient estimates it is applicable only when the magnitude and form of heteroscedasticity is known.

An alternative and most appropriate procedure is to use test of hetero-consistent standard error on OLS estimates. In this method the original model is estimated using OLS and then white's test is applied to obtain hetero-consistent standard errors (White, 1980). In this study we are using hetero-consistent standard error OLS (HCOLS) because it allows one to avoid heteroscedasticity without using weights and it is also applicable even if nothing is known about the form of heteroscedasticity.

Data Description, Sources And Definition Of Variables

The relationship of political instability with growth, poverty and income inequality is evaluated using three alternative categories of political instability. The first dimension named "formal political instability" (FPI) is defined as propensity of government collapse by either constitutional and/or non-constitutional means. The FPI index is composed of four celebrated measures: legislative elections, major constitutional changes, major cabinet changes and effective executive changes. The

second index “informal political instability” (IPI) is based on five measures of mass violation: assassinations, strikes, purges, riots and revolutions. The last measure “coups D’Etat” reflects the forced transfer of power which is now commonplace in many countries. Data on all the political instability measures is taken from Cross National Time Series Data Archives (CNTS report, 2012). Table 1 portrays the pair wise correlation matrix among different measures of political instability. Table shows a fairly low correlation among ten measures of political instability. Only assassinations and revolutions, and legislative elections and coups d’Etat have partial correlation greater than 0.50. This little correlation among alternative measures of political instability shows that each measure has some information and properties that are not captured by others. Each set of these measures forms an important dimension of political instability which is different from the other. Table 2 is the summary statistics of all important variables used in this study. Assassinations, a measure of informal political instability, has the highest average value (& standard deviation) of 4.14 (0.52).

Data on economic and institutional variables is from World Development Indicators online database (2014), PovcalNet online database (2014), International Country Risk Guide database (2013) and Alesina et al. (2003). The data set include 103 countries from both developed and developing regions of world. The cross section is made by taking average of the data between period 1984 and 2011. Table 3 displays the correlation matrix of political instability measures with growth, poverty and income inequality. Each measure of political instability has standard negative relationship with growth and positive with poverty head count ratio and income inequality.

Table 1
Correlation matrix of political instability variables

		1	2	3	4	5	6	7	8	9	10
1	Coups D’Etat	1									
2	Assassinations	0.0681	1								
3	Strikes	0.0223	0.1314	1							
4	Purges	0.0447	0.1534	0.0738	1						
5	Riots	0.0594	0.1506	0.4625	0.1632	1					
6	Revolutions	0.2917	0.5472	-0.017	-0.2021	0.1165	1				
7	Cabinet changes	0.3777	0.1645	0.0874	-0.123	0.0649	0.223	1			
8	Executives changes	0.2332	0.1672	0.2829	-0.066	0.0626	0.0152	0.4106	1		
9	Legislative elections	0.5888	-0.016	-0.086	0.0313	-0.044	0.2043	0.457	0.156	1	
10	Constitutional changes	-0.258	0.165	0.278	-0.176	0.052	-0.134	-0.086	0.325	-0.202	1

Table 2
Descriptive statistics of important variables

Variable	Observations	Mean	Std. Dev.	Min	Max
Political Instability Measures					
Coups D'Etat	103	0.015086	0.035227	0	0.217391
Assassinations	103	0.242068	0.521945	0	4.142857
Strikes	103	0.179233	0.27803	0	1.392857
Purges	103	0.028803	0.062791	0	0.392857
Riots	103	0.374154	0.589674	0	3.928571
Revolutions	103	0.187177	0.272682	0	1.5
Cabinet changes	103	0.479973	0.230028	0	1.1
Executives changes	103	0.191553	0.140114	0	0.565217
Legislative elections	103	0.074055	0.083779	0	0.391304
Constitutional changes	103	0.241256	0.072065	0.086957	0.521739
Economic and Institutional Variables					
Poverty	103	30.98525	31.61724	0.048571	95.15
Income inequality	103	40.15709	9.589034	24.79	66.51667
GDPPC	103	8861.759	13589.79	155.0149	55298.09
GDPPC growth	103	1.728036	1.507374	-2.76242	8.696973
Corruption	103	2.985274	1.164687	0.616071	6
Ethnic tensions	103	0.451676	0.263547	0.0119	0.9084

Table 3
Correlation matrix of political instability with growth, poverty and income inequality

		1	2	3	4	5	6	7	8	9	10	11
1	Economic growth	1										
2	Poverty	-0.8651	1									
3	Income inequality	-0.3952	0.6085	1								
4	Coups D'Etat	-0.3733	0.3595	0.1299	1							
5	Assassinations	-0.0765	0.1606	0.2547	0.0681	1						
6	Strikes	-0.0204	0.0668	0.1533	0.0223	0.1314	1					
7	Purges	-0.2512	0.1702	-0.141	0.0447	0.1534	0.0738	1				
8	Riots	-0.194	0.2349	0.082	0.0594	0.1506	0.4625	0.1632	1			
9	Revolutions	-0.3256	0.3923	0.1752	0.2917	0.5472	-0.017	0.2021	0.1165	1		
10	Cabinet	-0.2937	0.2419	0.0596	0.3777	0.1645	0.0874	-0.123	0.0649	0.223	1	
11	Legislative elections	-0.3946	0.2988	-0.006	0.5888	-0.016	-0.086	0.0313	-0.044	0.2043	0.457	1

Interpretation of Empirical Results

Table 4 presents heteroscedasticity consistent OLS estimation results for growth model using averaged data for 103 countries from 1984-2011. To make analysis more comparable to existing studies we have grouped political instability index into three dimensions. Column 1 of the Table 4 shows that coups D'Etat, a measure of forced government, has negative and statistical significant coefficient. The estimated parameter indicates that occurrence of an additional coups D'Etat per year will reduce economic growth by 0.04 points. Results for other measures are reported in columns 2 and 5. Our results allow us to distinguish between impacts of different dimensions of political instability on growth. From column 2 we find that formal political instability has statistically significant impact on growth while impact of informal political instability is insignificant. Cabinet changes and legislative elections, most widely used measures of formal political instability, also support our hypothesis regarding adverse impact of political instability on growth.

Results regarding the other determinants of growth are also according to our expectations. Initial GDPPC have negative and significant sign confirming conditional convergence hypothesis as suggested by new classical growth models. Finally, higher inflation, population growth, and ethnic tensions slow down growth. Corruption, although not significant, but has expected positive sign.

Table 4

Impact of political instability on economic growth

Independent Variables	Dependent Variable is Economic Growth				
	1	2	3	4	5
GDPPC84(log)	-0.592*** (0.211)	-0.575*** (0.175)	-0.609*** (0.186)	-0.604*** (0.197)	-0.568*** (0.210)
Coups D'Etat	-0.0409** (0.0200)				
Formal political instability		-1.388*** (0.513)			
Cabinet changes			-2.120*** (0.751)		
Legislative elections				-5.994*** (1.774)	
Informal political instability					-0.0140 (0.0405)
Inflation	-0.00145** (0.000582)	-0.00142** (0.000584)	-0.00123** (0.000606)	-0.00104* (0.000581)	-0.00150** (0.000668)

(Table Continued...)

Population	-0.520***	-0.685***	-0.629***	-0.653***	-0.582***
	(0.177)	(0.176)	(0.176)	(0.185)	(0.180)
Ethnic tensions	-0.404**	-0.512***	-0.495***	-0.331*	-0.405**
	(0.183)	(0.179)	(0.176)	(0.174)	(0.189)
Corruption	0.182	0.0253	0.0780	0.0715	0.233
	(0.197)	(0.198)	(0.190)	(0.188)	(0.205)
Constant	5.472***	6.586***	7.748***	7.352***	5.975***
	(1.395)	(1.295)	(1.554)	(1.511)	(1.432)
Observations	103	103	103	103	103
R-squared	0.304	0.364	0.346	0.338	0.265
White standard errors in parentheses					
*** p<0.01, ** p<0.05, * p<0.1					

Table 5 depicts results for the HCOLS estimation of political instability on poverty head count ratio. Column 1 show that informal political instability has positive and significant coefficient indicating that higher level of political instability worsen poverty rates. An occurrence of additional strikes, riots, and revolutions hinder the effectiveness of Government policies, threaten foreign investment and create unemployment which worsen poverty rates. Column 2 and 4 show that formal political instability and coups D'Etat has positive coefficients, but they are not significant statistically. Our results also indicate that a constitutional change, an important formal political instability measure, has significant positive impact on poverty. While direct effect of formal political instability and coups D'Etat on poverty is insignificant there indirect effect is significant. On the other hand, indirect impact of informal political instability is insignificant. The indirect effect of political instability measures is channeled through economic growth and is estimated using simultaneous equation approach where all other determinants of growth are excluded.

Table 5
Impact of political instability on poverty

Independent Variables	Dependent Variable is Poverty Head Count Ratio			
	1	2	3	4
Initial dependent	0.0732**	0.0889**	0.0916***	0.0883**
	(0.0337)	(0.0349)	(0.0307)	(0.0350)
Informal political instability	0.0639***			
	(0.0238)			
Formal political instability		0.0913		

(Table Continued...)

		(0.161)		
Constitutional changes			0.544*	
			(0.322)	
Coups D'Etat				0.000719
				(0.00812)
Economic growth	-0.709***	-0.720***	-0.762***	-0.729***
	(0.0642)	(0.0712)	(0.0734)	(0.0692)
Population	0.481***	0.458***	0.480***	0.449***
	(0.118)	(0.120)	(0.122)	(0.118)
Ethnic tensions	0.159*	0.182**	0.170*	0.177**
	(0.0848)	(0.0883)	(0.0869)	(0.0872)
Inflation	0.000505	0.000557	0.000803**	0.000572*
	(0.000311)	(0.000344)	(0.000382)	(0.000341)
Constant	7.210***	7.274***	8.321***	7.354***
	(0.598)	(0.643)	(0.858)	(0.614)
Observations	103	103	103	103
R-squared	0.873	0.864	0.869	0.864
White standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Table 6
Indirect impact of political instability on poverty

	1	2	3	4	5	6
	Dependent Variables					
Independent variables	Poverty	Growth	Poverty	Growth	Poverty	Growth
Growth	-0.112		-0.133		-0.0114	
	(0.121)		(0.135)		(0.126)	
Informal political instability	0.239***	-0.0295				
	(0.0543)	(0.0442)				
Formal political instability			0.256	-0.861**		
			(0.525)	(0.375)		
Coups D'Etat					0.0952***	-0.0466***
					(0.0227)	(0.0172)
Constant	2.747***	1.697***	2.555***	1.656***	4.106***	0.857**

(Table Continued...)

	(0.279)	(0.154)	(0.300)	(0.148)	(0.462)	(0.352)
Observations	103	103	103	103	103	103
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.1						

Statistical results for the impact of political instability on income inequality are given in Table 7 and 8. It is clear from the Tables that direct and indirect impact of formal and informal political instability on income inequality is statistically significant. Direct impact of coups D'Etat is insignificant while its indirect impact on inequality is significant. Our results confirm that all dimensions of political instability are detriment to income inequality; higher level of political instability increases income inequality.

We also found support for Kuznets hypothesis which states that initial level of development in GDP will cause inequality to increase, while at alter stages growth in GDP reduces income inequality. Other detriments of income inequality, such as, ethnic tension and inflation have expected positive signs.

Table 7

Impact of political instability on income inequality

Variables	Dependent Variable is Income Inequality		
Initial dependent	0.639***	0.662***	0.643***
	(0.0414)	(0.0378)	(0.0400)
Informal political instability	0.00367*		
	(0.00195)		
Formal political instability		0.0697**	
		(0.0268)	
Coups D'Etat			0.0779
			(0.431)
Economic growth	0.143***	0.154***	0.145***
	(0.0339)	(0.0332)	(0.0371)
Squared Economic growth	-0.00912***	-0.00957***	-0.00934***
	(0.00214)	(0.00209)	(0.00227)
Ethnic tensions	0.0278*	0.0339**	0.0284**
	(0.0145)	(0.0136)	(0.0137)

(Table Continued...)

Inflation	0.0000615	0.0000543	0.0000642
	(0.0000531)	(0.0000446)	(0.0000534)
Constant	0.810***	0.674***	0.790***
	(0.218)	(0.213)	(0.246)
Observations	103	103	103
R-squared	0.826	0.834	0.823
White standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 8
Indirect impact of political instability on income inequality

	1	2	3	4	5	6
	Dependent Variables					
Independent variables	Inequality	Growth	Inequality	Growth	Inequality	Growth
Growth	-0.0360**		-0.0324**		-0.0306**	
	(0.0155)		(0.0157)		(0.0148)	
Formal political instability	-0.0500	-0.861**				
	(0.0606)	(0.375)				
Coups D'Etat			0.000537	-0.0466***		
			(0.00285)	(0.0172)		
Informal political instability					0.0172***	-0.0295
					(0.00664)	(0.0442)
Constant	3.723***	1.656***	3.731***	0.857**	3.736***	1.697***
	(0.0347)	(0.148)	(0.0578)	(0.352)	(0.0341)	(0.154)
Observations	103	103	103	103	103	103
Standard errors in parentheses						
*** p<0.01, ** p<0.05, * p<0.1						

Conclusion

The objective of this study has been to examine the relationship of political instability with economic growth, poverty and income inequality. We have used three dimensions of political instability namely, formal political instability, informal political instability and coups D'Etat. Our findings for the impact of different dimensions of political instability on growth are in conformity with most of literature, suggesting that higher degree of political unrest reduces the economic growth.

In analyzing the link of political instability with poverty and income inequality we have used both direct and indirect means. Formal and informal political instability has statistically significant and positive impact on poverty; higher level of political instability increases poverty. Similarly we find that direct effect of Coups D'Etat on both poverty and income inequality is insignificant, while its indirect effect (through economic growth) is significant. On the whole our study indicates that all dimensions of political instability have damaging repercussion on poverty and income inequality. Our results suggest that governments in highly politically instable countries need to address the root causes of political instability and try to make a stable political system and policies. Only then, countries can attain higher and sustained economic growth and lower poverty and inequality rates.

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Appendix

Data and Variables Description

Sr. No.	Variables	Data source	Description
1	Coups D'Etat	CNTS report, 2012	No. of forced/ constitutional changes in the government structure in a year.
2	Assassinations	CNTS report, 2012	Any politically motivated murder of Govt. official/ politician.
3	Strikes	CNTS report, 2012	A protest of 1,000 or more workers against the policies of government.
4	Purges	CNTS report, 2012	A systematic elimination of political opposition by jailing or execution.
5	Riots	CNTS report, 2012	A violent demonstration or use of physical force on more than 100 citizens.
6	Revolutions	CNTS report, 2012	A legal/ forced attempt to change the top government or any rebellion to get freedom from the government.
7	Cabinet changes	CNTS report, 2012	No. of times cabinet posts are assumed by new ministers in a year.
8	Executives changes	CNTS report, 2012	No. of times executive power changes in a year.
9	Poverty	PovcalNet online database	Head count ratio measured as number of people living at less than \$2/day.
10	Income inequality	PovcalNet online database	GINI index
11	GDPPC	WDI	Per capita GDP at 2005 (US\$) constant prices
12	GDPPC growth	WDI	Calculated as (GDPPC1-GDPPC0)/GDPPC0
13	Corruption	ICRG	Corruption index (Scaled 0-6)
14	Ethnic tensions	Alesina et al. (2003).	Ethnic fractionalization index (Scaled 0-1)

ADOPTION OF NATIONAL QUALITY STANDARDS AND BUSINESS EDUCATION IN PAKISTAN: MOTIVATION AND CHALLENGES

Muhammadi Sabra Nadeem¹, Uzma Javed² and Qaisar Abbas³

Abstract

One of the widely acclaimed tools to assure quality in business education is accreditation. For this purpose, business program accreditation council was established by Higher Education Commission (HEC) of Pakistan. However, it is found that decision to seek accreditation is dependent upon the perception of institutions about the advantages and disadvantages of accreditation. This paper then aims to study motivation of Deans of business education institutions in Pakistan towards NBEAC accreditation. Interviews of Deans of business schools in Pakistan were conducted and the findings were illustrated using Simple Case x Theme Matrix (Miles & Huberman, 1994) and evaluated on the basis of institutional theory, information asymmetry and bandwagon theory. The results highlighted that decision to seek accreditation in lieu of institution theory was based on normative pressure i.e. standardization, continuous improvement, assurance of quality. As well as strong bandwagon effect was also found.

Keywords: Business Education, Accreditation, Pakistan, NBEAC, Institutional Theory.

JEL Classification: M000

Introduction

In early 2006, the adoption of a business education accreditation began with the establishment of National Business Education Accreditation Council (NBEAC) in Pakistan. NBEAC is still the only quality standards in business education in the country. According to 2018, out of 207 business education providers, 140 are members of NBEAC. Peer review visit was completed for 93 institutions and re-accreditation was granted to 21 business schools. Previous research from

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Nadeem, Abbas and Javed (2014), found that NBEAC standards are compatible with the international quality standards of business education i.e Association to Advance Collegiate Schools of Business (AACSB), Association of MBAs (AMBA), European Quality Improvement system (EQUIS) and South Asian Quality Standards (SAQS) standards and can serve as a cornerstone for the internationalization of business schools (Nadeem, Abbas, & Javed, 2015). However, there is a lack of research on the motivation of business schools towards accreditation. Therefore, this research attempts to fill the gap in the context of the decision of the deans of the business schools and the motivation to adopt these quality standards of NBEAC. On the basis of institutional theory, this study will discuss the strengths that interfere with the adoption of NBEAC quality standards by business schools.

To achieve the research objective, this paper is divided into three main sections, the second section will discuss the historical growth of business education in Pakistan, followed by the third section, which explains the relationship between accreditation and institutional theory; the fourth section discusses the methodology while the fifth section concludes the research by highlighting the main findings and the direction of future research.

Business Education in Pakistan

For the first time, the importance of business education was introduced into the National Education Commission in 1959 (Khan, Shah & Azzam, 2011). However, thanks to the establishment of the Higher Education Commission (HEC) in 2000, business education become more competitive (Kaleem, 2005; Khan et al., 2011). Currently, there are 166 degree grant institutions, according to the Higher Education Commission, which offers business education in Pakistan.

Even apart from growth, educational institutions faced many problems. Quality assurance has been identified as a key issue within the framework of HEMTF 2005-2010. To address this problem, HEC has established standards that meet the International Standards for institutions and program evaluation (HEMTF, 2005-10). Enhancing faculty quality, infrastructure and research was seen as one of the key dimensions and a critical factor was the reliance on HEMTF 10-15 (Batool & Qureshi, 2007). For the purpose of retention, the NBEAC was established on August 15, 2006. NBEAC is not only limited to the business education program but has a broader umbrella and has the authority to ensure the quality of public administration and commerce programs too. However, currently its only limited to the accreditation of BBA and MBA program.

The call of accreditation was not very well responded by the stakeholders i.e. institutions. Initially the response was very slow are only eleven institutions seek accreditation from NBEAC by 2012. However the process gain recognition as time lapse and in 2016 the number of accredited institutions raise to 34. Whereas seventy four institutions were in the process of accreditation. by 2018 the figures further raise and add to 140 institutions as the member of NBEAC. These figures highlight-

ed the need to examine the motivation of deans to obtain NBEAC accreditation. The following section will discuss the literature on motivation for accreditation and will attempt to create link between institutional theory and motivation of deans toward accreditation.

Isomorphism and Accreditation in Pakistan

Social structures and behaviors along with normative and cultural cognitive forces are major focus of institutional theory (Hodge, 2010). Further to this notion, the theory mainly focuses on the concept of institutional isomorphism, presented by DiMaggio and Powell in 1983. It is highlighted that because of external pressure, organizations in the same environment adopt the same process and structure. There are three types of isomorphism i.e. Coercive, mimetic and normative standard that drive internationalization (Hodge, 2010). Coercive pressure resulted in need to attain legitimacy in the society due to pressure attained by policies and laws of the country. Furthermore, demand from the society towards certain norms and cultural shift do played as a coercive force to attain isomorphism. Mimetic isomorphism occurs on purpose, and the organization adapts best practices of other organizations in response to some uncertainty. As per DiMaggio and Powell 1983 and Hodge 2010; the organizations that are more successful and prospects are more imitated by the other organizations. This resulted in bandwagon effect that leads towards mimetic isomorphism. Normative isomorphism is a result of values and indirect adoption of standards across the organization through professional networks and formal education. The standard hyperlink is related to professionalism. To make a change in the organization, this three symmetry mechanism may operate independently or synchronously (DiMaggio & Powell, 1983)

Various providers of legitimacy were typified by Antunes and Thomas (2007) including image and reputation, research, citations, global performance rankings and international accreditation bodies (Antunes & Thomas, 2007).

The reason of isomorphism were studied by Durand and Dameron (2013) and Wilson and McKiernan (2011); and it revealed that North American models of business school were mimicked by business school around the world. These studies found out that strategic convergence was as a result to pressure to have good ranking internationally. Thus, a platform was developed due to accreditation to signal their quality internationally and domestically to gain world visibility and legitimacy.

Mimetic isomorphism is also referred to bandwagon effect. It is defined as when an innovation organization adopts the process due to diffusion rather than because it evaluates the returns of that innovation. The bandwagon effect is an unseen pressure exerted by existence of large number of organization adopting an new innovation (Abrahamson & Rosenkopf, 1993; Hodge, 2010; Tolbert & Zucker, 1994). The influence of the bandwagon effects increases as the number of adopters increases, putting pressure on non-adopters to adopt innovations (Tolbert & Zucker, 1994), thus creating a positive feedback loop (Rosenkopf & Abrahamson, 1999). In addition, in cases where the benefits of

innovation can not be determined in an easy way, the bandwagon effect is quiet evident (Hodge, 2010; Tolbert & Zucker, 1994). In term of adoption of NBEAC quality standards in Pakistan this scenario is almost the same. At present, there is a scarcity of data that has caused information inconsistencies and there is no information regarding the benefits of NBEAC accreditation. Therefore, there is dire need to study the phenomena in Pakistan.

Link Between Information Asymmetry and Accreditation in the Context to Pakistan

The concept of information asymmetry explains the relationship between the buyer of the seller and the seller involved in the transaction. The transaction and the user, as provided by Arrow in 1967. The buyer has less information about the product being sold to him, as the seller usually has more information about its product being sold to the buyer. This information asymmetry causes the Agency problem. In the variance scenario in higher education information, you work in two ways. There are two types of relationship that operate in the framework of asymmetric information in the context of tertiary education. First, there is a link between the institution of awarding grades and potential students. There is a wide range of programs available to choose when a potential student decides to obtain a business degree, so the student has incomplete information about the program most suited to aspects of his career in the future. In this case, accreditation is established as a signal device on the market, through which the quality and status of a specific program is indicated. The second type of relationship involves the employee and the institution. Generally, the organization has partial information about the candidate's advantages, so the candidate may also have incomplete information about the benefits of the organization.

The above Discussion Points Towards two Scenarios

1) Coercive, normative and mimetic pressures are necessary and lead institutions towards isomorphism. In order to be accredited by NBEAC, these three mechanisms may play a key role. For all businesses to be accredited by the NBEAC, HEC has been made mandatory in its 2012-2015 medium framework. Institutions must rely to demonstrate their legitimacy in the market, indicating the existence of coercive similarities. Furthermore, a mimetic pressure is also evident through joint degree programs and foreign grants, enrollment-based institutional funding, and environmental uncertainties such as inconsistent government policies on tertiary education. Some factors may force organizations to inadvertently adopt the standards and culture of other organizations, including TTS, internships, training programs, and staff training. The outcome of these activities can be standardized. Under such pressure, the deans of Pakistani business education institutions are forced to achieve external and internal benefits by adopting NBEAC quality standards.

2) The chances for the presence of Bandwagon effect are enhanced due to the absence of research that can identify the potential benefits of NBEAC accreditations. Hence, both screening and

signaling may be used by business education institutions in Pakistan in this situation.

Methodology

Exploratory study is identified to be the most appropriate whilst keeping in view the research objectives under consideration. Business education accreditation is a new phenomena in Pakistan therefore, there is no prior research in the field that highlighting the motivation of deans towards NBEAC accreditation . Therefore, it is much needed that the factor associated with accreditation and motivation of deans must operationalized in Pakistan.

To meet the objective of the study Interviews with the deans of business schools were conducted. Based on the assertion that dean is the administrative head of the institution and responsible for the strategic decision making for the institution, such as to seek or not to seek accreditation. Further to this notion, NBEAC by-laws also consider dean responsible for accreditation process.

Interviews were conducted from the deans of the business schools. On the basis of their response towards the call of accreditation they are identified as; 1) Early movers: Institutions seek NBEAC accreditation during initial phase in 2012 labeled as 'A'; 2) Followers: institutions in the process of accreditation labeled as 'B' and; 3) Institutions still not applied for accreditation are categorized as Laggards are labeled as 'C'.

The deans of all business schools were contacted; however keeping in view convenience of time, cost and accessibility the priority was given to the location of Rawalpindi and Islamabad. The skype session were suggested to the deans of other location but the idea didn't go well.

Data Collection

A cover letter was provided to the deans along with the interview questions. The cover letter basically stated the purpose of the study, assurance of confidentiality and estimated interview time. There were almost same questions for early mover and followers institutions; however in the interview question for followers institution includes question regarding their late response towards the call of accreditation and what are the constraints or reasons for the delay in applying for NBEAC accreditation. the interview questions for laggard's institutions were completely different from the prior two sets of interview question for early movers and followers. The interview session was mainly focused on the problems encountered in order to seek NBEAC accreditation by laggard's institution.

A digital voice recorder was used to record interviews and then they were transcribed by the researcher. The interviews were transcribed exact word to word. As per interview protocols all the interviews were transcribed within the two days of interview to avoid any sort of misinterpretation. Many scholars associate with qualitative research such as Bergstrom 2010; Dilley

2004; Kyale 2006 and Roulston 2010; uncovered some controversies while transcribing the oral content to written text. According to them it is a re-construction rather than rewriting exact information. To avoid this bias the data transcription was done as earlier as possible. Furthermore, the transcribed document was resend to respondents to check the true essence of the response as stated by the key informants.

Data Analysis

The responses of business deans have been compared to the similarities and differences in the motives for seeking accreditation, the difference in actual benefits and the desired benefits, as well as the problems faced by institutions to obtain accreditation. Initially, a narrative methodology was used to evaluate the responses of all three classified samples. The "Simple Case-X Theme Matrix" by Miles and Huberman (1994) was used to compare themes that were selected in interview transcription. Meta-Matrix is a sort of Matrix that defines and systematically compares the data (Maurer, 2007).

Findings

This section will discuss the findings of the data on the basis of themes generated during interviews.

Factors Affecting the Decision of Seeking NBEAC Accreditation

The Deans identified several factors for their followers and laggards institutions that helped explain their slow response to the adoption of NBEAC and their decision to apply for accreditation. Groups showed some similarities and immediate differences.

The main concerns of this group were found to be knowledge about NBEAC accreditation as well as uncertainty about its future. Follower Institutions group did not show any impediments to resource shortfalls or funding, although they wanted to take time before applying for NBEAC. They want to assess whether they are just a passing mantle or whether they will become a norm. The findings and perception of followers institutions regarding the future of NBEAC is also evident from the interviews data of laggard's institutions. As two Deans from our sample out of Three were not aware about NBEAC and its quality standards. According to them it is not their decision rather may be top management have some awareness about NBEAC.

The decision to seek NBEAC is highly dependent upon top management commitment as identified by laggards and followers group. Further to this notion, lack of resources to improve infra structure and quality of faculty are also one of the major barriers.

Motivation

Similarities were seen between early movers and motivation to obtain accreditation across groups of followers. Ensuring the quality of business education and standardization was the constant message given by the deans of these institutions.

In order to gain a competitive edge and ensure market survival, deans of early movers seek NBEAC accreditation. Furthermore, they see NBEAC accreditation as an that can enhance internal quality of processes and system. This can be result in satisfying external and internal stakeholders and can give recognition and visibility in term of quality in the higher education service provider's. All these factors are also drivers for followers institution towards seeking NBEAC accreditation.

Perceived Benefits Versus Actual Benefits

Three groups of deans perceived several resource based and process based benefits. The deans of the institutions of early movers perceived that internal processes can be improved and the quality of their program can be assured due to accreditation and all this can result in increased student enrollment and development or the faculty. On the other hand, deans from followers institutions believed that the major benefit they can exercise will be student and faculty development, satisfaction and also, enhancing the reputation of the institution. Deans of laggard's institution perceived that accreditation as a source to improve their faculty infrastructure and increase their funding as well.

Student and faculty satisfaction and learning will improve due to NBEAC accreditation was the consistent message cited by the deans of followers and laggards institution. However, once the institution being accredited, the scenario was much different. As per deans of early movers institutions, the rigorous exercise towards attainment of NBEAC accreditation due help them to improve their internal process and procedures. The processes are now more towards quality attainment. However, no major benefit has been exercised in term of increase in student enrollment. Furthermore, there is no change in the faculty recruitment has been exercised since last four years as an accredited institution. However, visibility of the program and institution does increase and an incremental upwards trend has been exercised in graduate program admissions, as identified by one of the early mover institution.

Conclusion

The responses of deans of institutions are summarized in Table-1. To operate in a professional manner is identified as the basic motivation of the deans towards accreditation as per comparison of responses given by the three groups of deans as identified earlier as early mover; followers and laggards. from the comparison results. Thus, from the research findings, normative pressure was very evident. However, if by law the accreditation will be mandatory, the institutions top management will not have any choice but to opt for accreditation as per pointed out by the deans of laggards institution.

The presence of indirect bandwagon effect is the second theme that is identified. Before going towards accreditation the institutions did not conduct any formal analysis. Also, their strength is further strengthened as per due to the absence of data highlighting the benefits if NBEAC accreditation. Hence this supports our assumption that bandwagon pressure and information asymmetry has their strong presence and interplay an important role towards the response of deans to the call of accreditation. the increasing number of NBEAC registration and response of institutions towards attaining NBEAC accreditation does support that in the absence of any research on NBEAC and its outcomes for institutions. This is bandwagon effects that pressing institutions to seek accreditation.

Also, accreditation is seen as tool to signal the quality of the program by the institutions. Since the number of business schools are growing in Pakistan, NBEAC accreditation can easily used to market position one institution as the best and quality business education provider. As accreditation is seen as the distinctive mark of quality (Lejeune 2011, Scherer et al., 2005, Hodge 2010), by adopting accreditation standards institutions can easily signal the quality of their program in the market.

Table 1
Interview Findings

Decision of Apply for NBEAC Accreditation			
A1	Top management commitment,	Workload of faculty	Focus on quality of teaching
A2	Too much documentation		
B1	Unawareness about NBEAC	Dearth of commitment from top management	
B2	Uncertainty about NBEAC's Future		
B3	Unavailability of financial resources		
B4	Unawareness about NBEAC	Uncertainty about NBEAC's Future	Unavailability of financial resources ; Uncommitted top management
C1	Dearth of commitment from top management; Unawareness about NBEAC	Unavailability of financial resources	Faculty, Resources and infrastructure
C2	Unawareness about NBEAC	Dearth of commitment from top management;	Unavailability of financial resources
C3	Dearth of commitment from top management;	Unavailability of financial resources	Faculty, Resources and infrastructure

Factors that motivates Deans to attain NBEAC accreditation			
A1	Quality Assurance (Normative pressures)	To attain Competitive advantage (Normative pressures)	
A2	Quality Assurance (Normative pressures)	Improvement in infrastructure (Normative pressures)	
B1	Teaching Quality (Normative pressures)	improving program (Normative pressures)	
B2	Standardization (Normative pressures)	Stakeholders satisfaction (Signaling)	
B3	Standardization (Normative pressures)		
B4	Visibility and Recognition of institution (Signaling)	Quality Assurance (Normative pressures)	Improvement of internal process(Normative pressures)

Perceived Benefits			
A1	Improvement in internal process (Normative pressures)	Quality Assurance (Normative pressures)	Development of faculty (Normative pressures)
A2	Hiring and development of faculty (Signaling)	Improvement in Research and publications	Increase in student enrollment (Signaling)
B1	Quality of program, hiring and retaining of quality faculty (Signaling)	Internationalization (Signaling)	Quality Assurance of student, Student satisfaction and retention (Signaling)
B2	Transparency (Normative pressures)	Faculty learning and development Student learning (Normative pressures)	Improvement in research and publication (Signaling)
B3	Quality Assurance (NOR)		
B4	Increase in student enrollment (Signaling)	Enhance reputation of the institution (Screening)	Visibility for the institution (Signaling)

(Table Continued...)

C1	To seek funds (Normative pressures)		
C2	Don't Have any information regarding the benefits.		
C3	Internationalization (Signaling)	Good quality of student (Signaling)	Hiring and retention of quality faculty (Signaling)
A1	Quality Assurance		
A2	Development of faculty	Development of research policy	Increase in student enrollment at graduate level

NOR: Normative pressures; SIG: Signaling; SCR: Screening

The findings of this research also revealed that institutions seeking accreditation get visibility in the market and recognition. Previous researches in the context of international accreditation (Hodge 2010; Hou 2013; Roller et al., 2003; Elliot 2013) support this stance. Previous literature on international accreditation identified top management commitment as one of the important barriers in adopting international accreditation standards (Scherer et al., 2005). In this study the findings are somewhat consistent that top management commitment is an important aspect; however, due to the infancy age of NBEAC in the current scenario, awareness about NBEAC, ambiguity about the future of NBEAC and lack of funding to improve infrastructure and faculty is found as important and most impeding factors.

The decision for international accreditation is affected due to the lack of pressure on stakeholders as per identified by Roller et al. (2003). Pressure on stakeholders has been identified as one of the antecedents of internationalization by Hodge (2010). Stakeholder's awareness and pressure can strengthen the process of accreditation as per identified by the Deans of leading institutions. Slow rate of response towards the call for accreditation resulted due to the absence of coercive isomorphism in terms of mandatory status of NBEAC and awareness of stakeholders about NBEAC. In addition, lack of commitment in top management has its effect over the decision of seeking accreditation and thus considering them as an important factor. From the research findings signaling and screening are both evident. Attainment of good faculty and students by accreditation was a common perception by B-schools. Also, to enhance better job opportunities, it is essential to enhance the reputation of the program. On the basis of findings, the model for accreditation in Pakistan is illustrated in Figure-1

Further, this research concluded that the factors related to the motivation of Deans to seek accreditation are continuous improvement in the process of standardization and the assurance of good quality. Furthermore, the outcomes of accreditation are perceived as faculty hiring, retention and student retention as well. An issue was raised by Deans, that the major stakeholders of higher educa-

tion faculty and students are not aware of accreditation. Therefore, they are not in a position to question institutions regarding accreditation and quality standards.

In the context of business education accreditation in Pakistan these findings provoked several questions in light to the mentioned context. Such as 1) what is the perception of internal stakeholders on the process of accreditation? 2) What is the impact of accreditation on the performance of institution?

The below model concludes that this research can be generalized by using quantitative research in future studies.

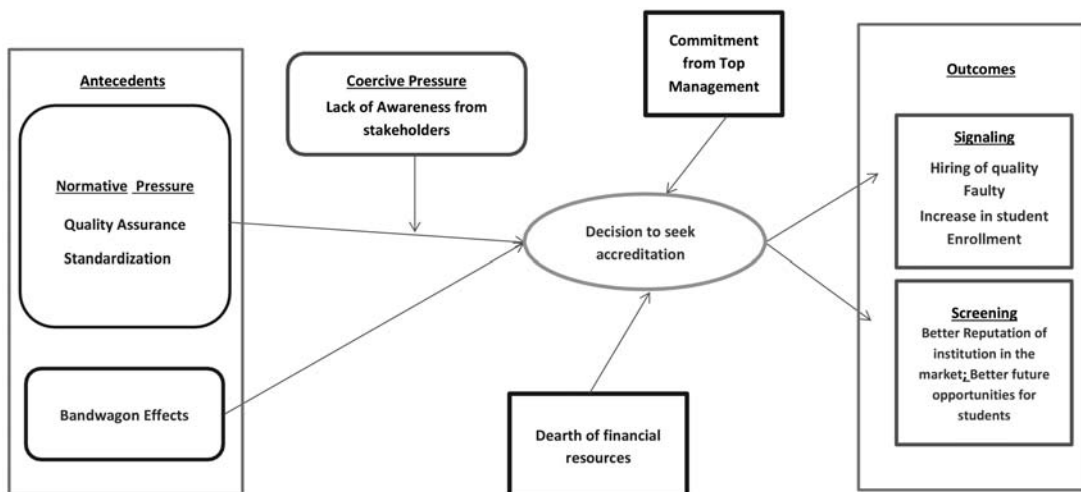


Figure 1: Model showing Antecedents, Outcomes and Moderators of Accreditation in Pakistan

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ASSESSING THE EXISTENCE OF RSQS (RETAIL SERVICE QUALITY SCALE) IN THE RETAIL STORE & SUPERMARKETS OPERATING IN KARACHI

Rizwan Ahmed¹, Zafar Mehdi² and Hina Samreen³

Abstract

This study examines the service quality of retail supermarkets using Retail Service Quality Scale (RSQS) developed to assess the extent to which the customers are satisfied with the service quality of retail stores. To recognize the factors that affect the perceptions of customers regarding service quality of retail stores located in Karachi, the technique of Exploratory Factor Analysis (EFA) is used. The technique extracted eight (8) dimensions as the predictors of service quality and confirm the existence of theoretical framework of RSQS. However, five (5) factors out of eight (8) appeared statistically significant. A regression model is fitted using five significant factors extracted from EFA and goodness of fit aspect of the fitted model is examined. The study also identified the aspects pertinent to service quality in which the retail stores need to make improvements in order to make the customers satisfied.

Keywords: Service Quality, RSQS, Retail Service Quality, Exploratory Factor Analysis.

JEL Classification: M390

Introduction

Consumer loyalty pertinent to service quality is an elementary and a critical element for achieving business success. The Malcolm Baldrige National Quality Award (1987) perceives the service quality as the focal point for the award process pertinent to consumer loyalty. Currently, Pakistan is experiencing the emergence of local as well as foreign brands of supermarkets that are opening their outlets. Due to this, Karachi is also experiencing the expansion in retail business.

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Nearby gatherings, for example, Naheed Supermarket, Imtiaz Supermarket, Agha Supermarket, Chase Up, and Carrefour are some brand names that are growing rapidly and these organizations have opened new supermarkets in almost all parts of the city. Having the market potential realized, foreign chains of stores like METRO and Carrefour are operating successfully. Also, local business giant, Lucky Group opened their shopping mall as Lucky One in 2017 and marked its entry in the retail sector.

In the literature pertinent to the service quality, the methodologies of SERVQUAL, SERVPERF scales were initially used to measure perceived service quality, but later on Dabholkar, Thrope and Rentz (1996) developed a scale known as Retail Service Quality Scale (RSQS) using an argument that existing measures of service quality do not incorporate the perceptions of customers regarding service quality of retail stores appropriately. Therefore, to observe the dimensions relevant to service quality of retail stores, they identified and introduced a factor structure that follows a hierarchy to observe the dimensions which are important for retail customers. The ultimate objective of every business is profit maximization and that can be achieved through an increase in sales volume in the competitive market by improving service quality. The significant effect of service quality on business performance cannot be denied as it lowers costs, enhances customer satisfaction, affect customer loyalty. (Ha et al., 2014). The RSQS model has the following six dimensions that measure the existence of service quality in retail sector.

Physical Aspect: Modern looking equipment, neat and clean environment and attractiveness of shopping materials are included in this dimension. It is the physical layout that has an impact on the expectation and perception of the customer. In case of supermarket the outer and inner layouts' orientation and the clean and order in the placement of the items influences the expectation and perception of the customer

Convenience: It covers the convenience aspect regarding shopping such as the location of the shopping place is easily accessible, the layout of the shopping mall that makes it convenient for customers to explore the goods they would like to purchase. It also makes it comfortable for them make to move around. The other aspects pertinent to this dimension are the availability of ATM machines and home delivery service.

Reliability: Similar to the dimension included in SERVQUAL model, this dimension has two sub dimensions in which some other variations were introduced. (Zeithaml, Parasuraman & Berry, 1985). Customers usually perceive reliability, as a blend of "keeping promises" and "doing it right". To measure reliability, Dhabolkar, et al. (1995) considered an additional factor "availability of merchandise" and merged it in "doing it right". Contrasting to the SERVQUAL, "problem solving" is linked with "reliability", whereas, Dhabolkar, et al. (1995) introduced problem solving as a distinct factor.

Personal Interaction was considered as a third dimension, which is a combination of two items, namely “service employees, inspiring confidence” and “being courteous/helpful”. Problem Solving was identified as “a fourth dimension, which addresses handling of returns and exchanges as well as complaints”.

Policy dimension covers the policy dimension of service quality as the stores’ policy may have a direct influence on the customers’ perception.

Literature Review

Customer Satisfaction

Literature on customer satisfaction highlights its importance. Anderson, et al. (1994) emphasized that the customer satisfaction should be considered as a judgment that is based on their overall experience with a particular service or product that the customers availed or used. The subjective judgment is not independent. The personal bias is the part of customer judgment. Customer satisfaction has been considered as the key factor for the success of a business. Fonseca (2009) identified customer satisfaction as an important construct and stated its significance as “satisfaction is a critical measure for a firm's success”. Sivasdas and Baker-Prewitt (2000) elaborated the importance of customer satisfaction as the level that is used to influence the customers’ “attitude” and “word of mouth communication”. Whereas Garbarino and Johnson (1999) defined it as a significant determinant of future purchase behavior. Customer needs to purchase same brand or rely on services, is the outcome of his/her belief that certain product or service successfully deliver their promises in past purchases.

Service quality appears to be a permanent feature of customer satisfaction; it is used to assess performance of a business entity. According to Kotler and Keller (2011), Customers’ favorable ratings is a major parameter of a firms’ financial health. To determine the success of a product or service, some researchers such as Anderson and Sullivan (1993) identified it as a criterion to assess business performance as “Many firms use customer satisfaction as a criterion to diagnose product or service performance”. In terms of a business strategy Gomez, et al. (2004), highlighted the significance of customer satisfaction as “retailers recognize that customer satisfaction plays a key role in a successful business strategy” (Gomez et al., 2004).

The Rationale for Service Quality in Retail Stores

Several studies identified the need for determining service quality because of the immense growth in the retail sector. Service quality is identified as the important tool for retail stores to attain the objective of competitive advantage, and it is possible through learning about the customers’ consumption experiences (Alueregowda, 2013; Arun, Manjunath & Shivashankar, 2012).

Consumers have more choices of supermarkets, they are becoming more quality-conscious, and it is desired that the retailers assess their demands in meeting customers' expectations (Das et al., 2010). A mushroom growth of super markets in retail sector has been observed in Pakistan. This offers multiple options for the retail customers. The responsibility of the supermarket managers has been increased in terms of making their business competitive in multiple aspects that shapes their perception and expectations.

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The researchers worked on the service quality of retail stores emphasized on the need for taking competitive advantage using enhanced service quality as a tool. It is evident that the department stores need to sustain their competitive advantage if they wish to remain a dominant player in their respective markets. Rajaram and Sriram (2014) emphasized on retailers to accommodate their customers' perceptions and expectations in their business policies to achieve the objective of sustainability. Establishing a model that links the requirements of customers and their satisfaction level is critical to examine the existence of service quality. Research planning to gather relevant information is the most important component of this process. If the existing model of customer satisfaction is applicable in practice to incorporate the requirements of organizations as well as of its customers, it is very helpful for a researcher to conduct meaningful research.

Service Quality and Customer Loyalty

Backstrom and Johansson (2006) elaborated that the "customers' perceptions" regarding service quality are affected by aspects related to their personal characteristics and situational variables" whereas Amorim and Saghezchi (2014) defined personal characteristics such as values, age and attitude are intrinsic to the consumer that might influence their experiences. Customer 'value perception of the quality' in services would be different, age also play an important role to form perception through experience of shopping from superstores and finally their attitude that is either more favorable or less favorable for a certain supermarket brand.

Maintenance and improvement in service quality pertinent to customer satisfaction is imperative for the success of a business. Ha, et al. (2014) pointed out that a business is perceived successful if the customers feel satisfied with products/services and ultimately they tend to be loyal. To meet global standards, the growing retail sector has to be examined on the criterion of how customers perceive service quality and how they evaluate it (Davy & Sellappan, 2009). They further elaborated

that due to the increasing competition, customers' perception regarding a specific retailer is critical to determine customers' satisfaction and loyalty in the growing retail market specifically in Pakistani business environment.

Kumar (2016) described that the customers' perceived quality of products is critical to the success of retail stores and it contributes to the maximization of customer satisfaction. By providing great assortment and a wide range variety of brands, retailers could sustain their competitiveness. Ivanauskienė and Volungėnaitė (2014) indicated that competitiveness, in terms of assortment and brand variety, has an association to customer loyalty.

Customers' perceived quality is an important indicator and a measure of success of businesses, therefore there is a need that retail stores formulate and implement policies that would increase customers' satisfaction using service quality tools. Mistri and Bhatt (2013) considered the performance of a retail store as the key determinant for the customers' perceived service quality and organized Indian retail stores need to introduce customers' centric retail store services.

The relationship between the intention to visit the same store again and the perception of retail stores' service quality perception regarding that store was examined by Singh and Adlakha (2012) and the results supported the argument that by offering quality service to customers, a retail store can retain them. Customer retention is significant as they have multiple options to give up the less effective and choose better one that they believe would meet their expectations of services quality. In terms of cost perspective retaining consumes less capital than attracting the new one (Agolla, Makara & Monametsi, 2018). The purpose of attracting new customer requires supermarket to spend heavily on advertising to create a better image of the brand in the mind of customers. The new customer is more demanding in case of a dissatisfied customer of a competing brand. Retaining the current customer places an emphasis on supermarkets to maintain a network of relationship in order to scan the services dimensions that needs immediate improvements.

Comparative Analysis of Approaches for Service Quality

To characterize the overall service quality in the service sector, Parasuraman, et al. (1985) proposed the SERVQUAL scale. SERVQUAL is a model that measures the extent to which the business units that operate in the service sector, provide service quality to their customers. According to Parasuraman, et al. (1985), service quality was characterized using 10 dimensions named as tangibles, reliability, responsiveness, communication, access, courtesy, competence, reliability, security and understanding or knowing the customer. It was later improved with a model with five dimensions based on 22 items. The five (5) dimensions named as tangibility, reliability, responsiveness, assurance and empathy were included as the key elements to determine the service quality of a service providing set up. This model has been frequently used in literature to assess service quality.

As an alternative scale to assess service quality based on performance, Cronin and Taylor (1992) developed a model named 'SERVPERF'. The SERVPERF model includes 22 items without giving any importance to expectations of customers. Therefore, SERVPERF only focuses on perceptions of customers regarding service quality whereas SERVQUAL model operationalizes service quality by linking expectations of customers developed before availing services with the perceptions formulated after experiencing the services.

In the retail sector, service quality varies significantly as compared to other service providing entities. Finn and Lamb (1991) highlighted the difference in measurement scale pertinent to service quality in the retail sector. As the retail service is different in nature, therefore the scale that measures service quality in the retail sector is predominantly different as compared to the conventional service quality measurement.

To eradicate this constraint in the service quality model, another model Retail Service Quality Scale (RSQS) was developed and introduced by Dhabolkar, Thorpe and Rentz (1995) that measures service quality in the retail setup. Siu and Cheung (2001) conducted a study that recommended a refinement in the RSQS scale for its application in the retail businesses that focuses on the combination of goods and services and also identified the importance of the retail service quality measurement. It emphasized on the need for a survey that has to be conducted on a regular basis to measure the extent of service enhancement and customer satisfaction. Table 1 gives the comparison of three service quality approaches.

Table 1
Comparative Analysis of the Dimensions of Three Approaches

SERVQUAL	SERVPERF	RSQS
Tangibility	Tangibility	Physical aspects
Reliability	Reliability	Reliability
Assurance	Assurance	Policy
Responsiveness	Responsiveness	Personal interaction
Empathy	Empathy	Problem solving

To determine validity of Retail Service Quality Scale (RSQS), several studies were conducted. Examining the validity and reliability of RSQS in the Indian retail setting, Manjunath and Prabhu (2011) conducted a study. The results of the study supported the use of this model to assess the service quality. They concluded that RSQS model could be implemented to determine the overall service

quality that the retail stores provide and identified the variations in the overall service quality across time. Regarding the Indian customers, Khare (2013) observed the service quality of a retail store and found that service quality comprises of ambience, layout, and service and relationship dimensions. The rationale for focusing on the Indian context is the socioeconomic and cultural linkage between the Indian and Pakistani Society and the goods that the natives of both the countries consume are somewhat identical.

Considering Retail Service Quality Scale (RSQS) model as an appropriate and extensively used tool to assess service quality, this study is an effort to assess and identify the existence of dimensions of the RSQS model in some of the major supermarkets operating in Karachi, Pakistan.

Methodology

To explore factors that are the determinants of service quality, the method of exploratory factor analysis is used. For the items linked with each dimension, the technique of percentage analysis is used to classify responses into three groups named as Disagree, Neutral and Agree in terms of the percentages of responses to each item. (See Appendix 2).

To identify the determinants that are affecting perception of customers regarding service quality in retail sector, the technique of Exploratory Factor Analysis (EFA) is used. (Kaul, 2007; Kim & Stoel, 2004; Das, 2010). To design and use a questionnaire as a research instrument, the methodology of RSQS model, consists of eight (8) dimensions has been followed. The scores of items extracted in each factor are accumulated to create independent variables to represent each factor. Finally, the regression model is fitted to the data and residual analysis is performed to check validity of the fitted regression model as per the methodology adopted in Ahmed and Samreen (2011).

Research Instrument

This is a survey based study. Based on the literature review pertinent to three approaches to assess service quality namely RSQS, SERVQUAL and SERVPERF, a survey questionnaire is developed and used as a research instrument in this study. The target population is the customers who do shopping from prominent retail stores or supermarkets. The survey questionnaire is designed and uploaded to get the online responses of customers. The method of convenience sampling (snowball sampling) was used to receive responses and 275 valid responses were received. Appendix 1 exhibits the details of the items included in this study with reference to other studies that followed RSQS Model.

Data Analysis & Discussion

Reliability Analysis

To check the validity of the application of exploratory factor analysis, internal validity and reliability of the data is checked. The following table summarizes the results of reliability analysis. The value of Cronbach alpha computed for overall data is 0.919 which is closer to one and it indicates that performing exploratory factor analysis of this data is valid. Factor analysis is performed to check the internal consistency of the items converged in a factor and the Cronbach Alpha coefficients are all greater than the cutoff value of 0.6 except for factor F8.

Table 2
Reliability Analysis

Factors	Cronbach Alpha	No. of Items
Overall	0.919	36
F1	0.872	9
F2	0.763	5
F3	0.820	5
F4	0.756	4
F5	0.799	2
F6	0.633	3
F7	0.665	2
F8	0.458	3

Exploratory Factor Analysis

Table 3 summarizes the findings of Exploratory Factor analysis. The technique of Exploratory Factor Analysis extracted eight (8) factors that accounted for 60.558% variation in the response variable. Table 3 gives the factor loadings and variance explained by each factor. Factor F1 explains the highest variance (13.45%) in the data. The items converged in this factor have a factor loading greater than 0.5 except two items. Of all the items converged in Factors F2 and F3, one item in each of the factors, has the factor loading less than 0.5. The least percentage variation is explained by Factor F8 which is 4.404%.

The exploratory factor analysis results also indicate that some of the items that are the part of a specific construct as per the theoretical framework is not converged in that factor but converged in a factor it does not linked with. Ten items are converged in Factor F1, out of which, three belong to Personal Interaction, two are related to Reliability, two are the part of Security and one each from

the dimensions of Convenience and General Policy. These items can be considered as a combination of Reliability, Security and Personal Interaction. The second factor F2 has five items from Physical Look and one from convenience. The factor F3 is a mixture of the construct of Product and General Policy. In the fourth factor F4, the items belong to Problem Solving (PS) seems dominant as three out of six items converged in this factor belong to Problem solving whereas the other three items are related to the constructs of Convenience, Reliability and Personal Interaction. Factor F5 has two items related to Problem Solving, Factor F6 has one item each from Reliability and Convenience, Factor F7 has both items from Reliability and Factor F8 has two items from General Policy.

Table 3
Extracted Factors, Factor Loadings and Explained Variance

Dimensions	ITEMS	Loadings	Variation Explained (%)
F1	The location is accessible	.559	13.435
	Store performs the services right the first time	.408	
	The store charges the same price mentioned on the shelves	.700	
	Customers feel safe in their transactions	.610	
	Customers are able to trust employees	.658	
	Customers feel safe and secure in the vicinity	.659	
	Employees are knowledgeable to answer	.630	
	Employees give prompt service	.552	
	Employees are polite	.626	
	The store has operating hours convenient for customers	.453	
F2	Modern Looking Equipment	.658	9.103
	Restroom/Trial rooms are visually appealing	.694	
	Clean, attractive & convenient Restrooms	.803	
	Employees are well dressed	.562	
	Materials are visually appealing	.477	
	Store layout makes customers to move around easily	.643	
F3	The store accepts all major credit cards	.472	9.013
	The store offers high quality merchandise	.539	
	Perishable Products are fresh and not expired	.605	
	Products are in good condition	.735	
	The store offers variations in the Products	.716	
F4	The store provides the facility of home delivery	.594	7.986
	The store fulfills its promise to do repairs and alterations	.602	
	Employees treat customers courteously	.563	

(Table Continued...)

F4	The store willingly handles returns & exchanges	.593	
	The store takes sincere interest in Problem solving	.532	
	Employees are able to handle complaints directly and immediately	.550	
F5	The store understands the waiting time as important	.776	6.514
	The store tries to keep waiting time minimum	.793	
F6	The store layout makes shopping easier for customers	.615	5.068
	Merchandises are available timely	.587	
F7	The store maintains error free records	.529	5.036
	The store performs error free purchase transactions with the cards	.710	
F8	The store provides plenty of convenient parking for customers	.505	4.404
	The store offers discounts at different occasions	.612	

The Fitted Model

To predict overall service quality, the scores of individual item are accumulated to compute the values of eight dimensions extracted from EFA and used as independent variables in the regression model. Several models are fitted on the data using different combination of independent variables to select a regression model that follows all the assumptions of CLRM (Classical Regression Model). Table 4 gives the model summary.

Table 4
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.689 ^a	0.475	0.464	0.41874

The mean of the items converged in each dimension is computed to create score of independent variables. The scores of independent variables are then used to fit a regression model taking overall ratings of service quality as a response variable. Table 5 summarizes the results of Analysis of Variance (ANOVA) of the fitted model.

Table 5
Analysis of Variance (ANOVA)

Source	Sum of Squares	df	MSS	F	Sig.
Regression	40.694	5	8.139	46.418	.000 ^a
Residual	45.062	257	0.175		
Total	85.757	262			

The coefficient of determination (R^2) of the fitted regression model presented in Table 4 is 0.475 and it implies that the fitted model is able to explain 47.5% variation in overall service quality rating due to the variation in the independent variables extracted from Exploratory Factor Analysis (EFA). The regressors F1, F2, F3, F5 and F8 are found statistically significant as predictors of overall service quality. The results of Analysis of variance (ANOVA) presented in Table 5 represents that the model is a good fit on the data as the F statistic is significant ($p = 0.00$).

Table 6
Regression Coefficients Summary

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	0.597	0.236		2.529	0.012	0.132	1.062
F1	0.275	0.062	0.252	4.420	0.000	0.152	0.397
F2	0.093	0.045	0.104	2.059	0.040	0.004	0.181
F3	0.343	0.061	0.326	5.596	0.000	0.223	0.464
F5	0.086	0.035	0.122	2.476	0.014	0.018	0.155
F8	0.094	0.032	0.146	2.965	0.003	0.031	0.156

a. Dependent Variable: How do you rate the overall quality of this store?

The results of the fitted regression model that includes all independent variables used as predictors are presented in Table 6. All independent variables are found statistically significant with p values closer to zero. A regression equation is formulated as per the results of the fitted regression model. The factor F3 appeared as the strongest factor influencing service quality with coefficient value 0.343 followed by F1 with coefficient value 0.275, while factors F8, F2, and F5 loaded with the coefficient values 0.094, 0.093 and 0.086 respectively.

The assumptions related to classical linear regression model linked with normality and independence of residuals are examined using Normal probability plot and histogram of residuals. Figures 1 (a) and 1 (b) exhibit the results. The normal curve fitted on the histogram of residuals reflects a good fit whereas, the normal probability plot also indicates that the residuals are approximately normally distributed.

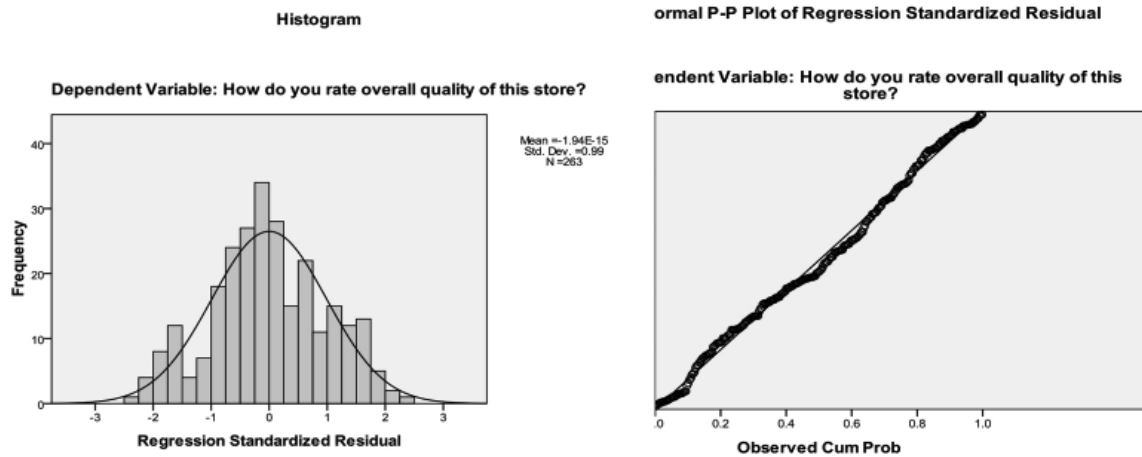


Figure 1a: Histogram & 1 (b) Normal Probability Plot

Conclusion & Recommendations

Data analysis extracted eight (8) factors on the basis of Exploratory Factor Analysis. Some of the items that are converged in a factor are not linked with that construct as per the theoretical framework. Factor 1 is a combination of items linked with the dimensions of Physical Aspects, Security, Personal Interaction, Policy and Reliability. The second factor encompasses some items from the dimension “Physical Aspects”. Factor 3, mainly includes aspects pertinent to Product and Policy. Factor 4 is a mix of Personal Interaction, Problem Solving, Convenience and reliability. The aspect of waiting time is covered in Factor 5. Factor 6 exhibits the Reliability and Convenience, Factor 7 reflects Reliability and Factor 8 covers the items that are included in the dimensions of Convenience and Policy.

Table 7 summarizes the results of the aspects pertinent to the service quality regarding which the customers are satisfied or dissatisfied.

Table 7
Aspects of Service Quality with which respondents are Satisfied or Dissatisfied

Dimensions	The Quality Aspects with which Respondents are:	
	<i>Satisfied</i>	<i>Dissatisfied</i>
<i>Physical Aspects</i>	This store has modern looking equipment Employees are well dressed Materials are visually appealing The store layout makes shopping easier The store layout makes customers to move around easily The location is accessible	Restrooms are visually appealing Restrooms are clean and Attractive The store provides the facility of home delivery The store has ATM machines
<i>Reliability</i>	The store has always performed error free purchase transactions with the cards Merchandises are available timely The store performs the services right the first time The store charges the same price mentioned on the shelves	The store fulfills its promise to do repairs and alterations The store maintains error free records
<i>Security</i>	Customers feel safe in their transaction Customers are able to trust employees Customers feel safe and secure in the vicinity	
<i>Personal Interaction</i>	Employees are knowledgeable to answer Employees give prompt service Employees are polite	Employees treat customers courteously
<i>Problem solving</i>	The store willingly handles returns and exchanges The store takes sincere interest in problem solving Employees are able to handle complaints directly and immediately Store understands that the waiting time is important	The store tries to keep waiting time minimum
<i>Policy</i>	The store has operating hours convenient for customers The store accepts all major credit cards The store offers high quality merchandise The store offers discounts at different occasions	
<i>Product</i>	Perishable products are fresh and not expired Products are in good condition The store offers variations in the Products	

The study also summarized the existence of service quality in the retail stores covered in this study. The perspective of service quality is divided into two groups with which either the customers are satisfied or dissatisfied. These groups are formulated using cumulative percentages related to three categories namely disagree (below 3), neutral (at 3) and agree (above 3). (See Appendix 2).

If the cumulative percentage exceeds 50% (below 3 on a scale 1 through 5), it identifies that the customers are not satisfied and if it less than 50 percent at a scale value 3, it exhibits that the respondents are satisfied.

In table 7 the areas of service quality with which the respondents are satisfied or dissatisfied are summarized. The findings of this study identified some physical aspects with which customers have shown their dissatisfaction such as availability of restrooms, home delivery services and ATM machines. Similarly, regarding some aspects of reliability related to alterations and repairs and maintaining error free records need proper attention to improve the image of the supermarket. The responses of the customers have also indicated the need for the employees to be more courteous. The data analysis pertinent to the waiting time also emphasizes on the need for structuring a proper customer load management to get the waiting time reduced.

Limitations

This study has only included the data collected from retail stores and supermarkets located in Karachi. To examine the service quality aspect with greater coverage, future research could focus on the supermarkets located in other regions and metropolitan cities of Pakistan such as Islamabad, Lahore, Rawalpindi, Multan, etc. Inclusion of more cities may broaden the scope of research in this important field. Due to the time limitation, the technique of convenience sampling is used in this study and future research is expected to rely on other sampling techniques including probability sampling.

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Appendix-1

EXPECTATIONS	Dimension	EXPERIENCE	Adopted from
1 Strongly Disagree 5 Strongly Agree	How do you rate the <i>physical look</i> of the store on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	The store has modern-looking equipment and fixture (PL1)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	Physical facilities (rest rooms and trial rooms) of the store are visually appealing (PL2)	1 2 3 4 5	Das, Kumar and Saha (2010)
1 2 3 4 5	The store has clean, attractive, and convenient restrooms & fitting rooms. (PL3)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	Employees of this store are well dressed and appear neat. (PL4)	1 2 3 4 5	Parasuraman and Zeithmal and Berry (1988)
1 2 3 4 5	Materials associated with this store's service (such as shopping bags, loyalty cards, and catalogues) are visually appealing (PL5)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996)
1 Strongly Disagree 5 Strongly Agree	How do you rate the <i>service convenience</i> of the store on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	The store layout at this store makes it easy for customers to find what they need (C1)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	The store layout at this store makes it easy for customers to move around in the store. (C2)	1 2 3 4 5	Xiao & Chernetskaya (2010) Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	The store provides the facility of home delivery (C3)	1 2 3 4 5	Added on our own
1 2 3 4 5	The store has ATM machines (C4)	1 2 3 4 5	Added on our own
1 2 3 4 5	The location of store is accessible (C5)	1 2 3 4 5	Panteloukas,Asopo, Buwag (2012)
1 Strongly Disagree 5 Strongly Agree	How do you rate the <i>reliability</i> of the store on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	When this store promises to do repairs or alterations by a certain time, it will do so (R1)	1 2 3 4 5	Parasuraman, Zeithmal and Berry (1988)

(Table Continued...)

EXPECTATION	Dimension	EXPERIENCE	
1 2 3 4 5	The store maintains error free records (R2)	1 2 3 4 5	Parasuraman, Zeithmal and Berry (1988)
1 2 3 4 5	This store always perform error-free purchase transactions with the cards (R3)	1 2 3 4 5	Parasuraman, Zeithmal and Berry (1988)
1 2 3 4 5	This store has merchandise available when the customers want it (R4)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	The store performs the service right the first time (R5)	1 2 3 4 5	
1 2 3 4 5	The store charges the same price mentioned on the shelves (R6)	1 2 3 4 5	
1 Strongly Disagree 5 Strongly Agree	How do you rate the security of the store on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	Customers feel safe in their transactions with the store (S1)	1 2 3 4 5	Parasuraman, Zeithmal and Berry (1988)
1 2 3 4 5	Customers are able to trust employees of the store (S2)	1 2 3 4 5	Parasuraman, Zeithmal and Berry (1988)
1 2 3 4 5	Customers feel safe and secure in the vicinity of the store (S3)	1 2 3 4 5	Added on our own
1 Strongly Disagree 5 Strongly Agree	How do you rate the personal interaction in the store on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	Employees in the store have the knowledge to answer customers' questions (PI1)	1 2 3 4 5	Xiao & Chernetskaya (2010) Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	Employees in this store give prompt service to customers (PI2)	1 2 3 4 5	Xiao & Chernetskaya (2010)

(Table Continued...)

EXPECTATION	Dimension	EXPERIENCE	
1 2 3 4 5	Employees of this store are able to handle customer complaints directly and immediately (PS3)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996) Zeithmal (1988)
1 2 3 4 5	The store understands that waiting time is important to the customer (waiting time : the whole time spent in the store, including the time waiting for payment) (PS4)	1 2 3 4 5	The store understands that waiting time is important to the customer (waiting time : the whole time spent in the store, including the time waiting for payment)
1 2 3 4 5	The store tries to keep the customers waiting time to a minimum (PS5)	1 2 3 4 5	The store tries to keep the customers waiting time to a minimum.
1 Strongly Disagree 5 Strongly Agree	How do you rate the <i>general policy of the store</i> on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	This store has operating hours convenient to all their customers (GP1)	1 2 3 4 5	Parasuraman, Zeithmal and Berry
1 2 3 4 5	This store accepts all major credit cards (GP2)	1 2 3 4 5	Xiao & Chernetskaya (2010) Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	This store offers high quality merchandise (GP3)	1 2 3 4 5	Xiao & Chernetskaya (2010) Zeithmal (1988)
1 2 3 4 5	This store provides plenty of convenient parking for customers (GP4)	1 2 3 4 5	Dabholkar , Thrope and Rentz (1996)
1 2 3 4 5	The store offers discounts at different occasions and festivals (GP5)	1 2 3 4 5	Added on our own
1 Strongly Disagree 5 Strongly Agree	How do you rate the <i>Products of the store</i> on the following attributes?	1 Strongly Disagree 5 Strongly Agree	
1 2 3 4 5	The groceries (e.g. vegetables, fruits, meat, milk, etc) are always fresh and not expired (P1)	1 2 3 4 5	Panteloukas,Asopo, Buwag (2012)
1 2 3 4 5	The products are always in a good condition (not broken, etc) (P2)	1 2 3 4 5	Panteloukas,Asopo, Buwag (2012)
1 2 3 4 5	The store offers the variations of a product-brand the customer needs(e.g. all flavors, sizes etc.) (P3)	1 2 3 4 5	Panteloukas,Asopo, Buwag (2012)

Other Information

	<p>How do you rate overall service quality of this store?</p> <p style="text-align: center;">1 2 3 4 5 6 7 8 9 10</p>	Added on our own
	<p>How often do you visit the store in average?</p> <p>a. Twice a week b. Once a week c. Monthly d. Occasionally</p>	
	<p>Gender</p> <p>a. Male b. Female</p>	
	<p>What is your age?</p> <p>a. < 20 years b. 20 – 30 years c. 31 - 40 years d. 41 -50 years e. 51 -60 years f. > 60 years</p>	
	<p>Level of education</p> <p>a. Secondary School b. High School c. Undergraduate d. Graduate</p>	
	<p>Area of residence</p>	
	<p>Monthly Expenditures on grocery items</p>	

Appendix-2

Dimensions	The Quality Aspects with which Respondents are:		Outcome
	Description	Cumulative % (Neutral)	
Physical Aspects	This store has modern looking equipment	34.2	Agree
	Employees are well dressed	35.3	Agree
	Restrooms are visually appealing	72.0	Disagree
	Restrooms are clean and Attractive	57.8	Disagree
	Materials are visually appealing	45.1	Agree
Convenience	The store layout makes shopping easier	28.7	Agree
	The store layout makes customers to move around easily	39.6	Agree
	The store provides the facility of home delivery	74.2	Disagree
	The store has ATM machines	55.6	Disagree
	The location is accessible	15.3	Agree
Reliability	The store fulfills its promise to do repairs and alterations	52.7	Disagree
	The store maintains error free records	50.9	Disagree
	The store always perform error free purchase transactions with the cards	43.6	Agree
	Merchandises are available timely	33.1	Agree
	The store performs the services right the first time	37.5	Agree
	The store charges the same price mentioned on the shelves	18.2	Agree
Security	Customers feel safe in their transaction	13.5	Agree
	Customers are able to trust employees	24.4	Agree
	Customers feel safe and secure in the vicinity	23.3	Agree
Personal Interaction	Employees are knowledgeable to answer	28.7	Agree
	Employees give prompt service	32.4	Agree
	Employees are polite	27.6	Agree

THE LONG RUN AND SHORT RUN RELATIONSHIP BETWEEN POVERTY AND LITERACY RATE IN PAKISTAN

Nisar Ahmad¹, Ezzah Batul² and Ramsha Saleem³

Abstract

This study investigates the long and short run relationship between poverty and literacy rate in Pakistan. For this purpose, the time series data from 1971 to 2013 is used. The sources of this secondary data are World Bank Development Indicators. Augmented Dickey Fuller test is used to check the stationarity of data. Poverty and literacy rates are found stationary at first difference. Johansen co integration is used to trace the long run relationship between poverty and literacy rate in Pakistan. The results indicate that poverty is reduced by 0.75 per cent due to one per cent increase in the literacy rate. Moreover, short run relationship between poverty and literacy rate is investigated with VECM and found no relationship in the short run.

Keywords: Literacy Rate, Poverty, Economic Growth, Long Run, Short Run.

JEL Classification: Z000

Introduction

Education is very important to attain sustainable economic growth and development along with human resource development of any country. The developed nations of the world have paved the path of their development due to human development. The people in the society learn how to live together through education. Therefore, all individuals of the society have their basic right to get education. Especially the primary education is much important and it is the state responsibility to provide education at primary level. Every religion has laid stress on the importance of education and

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learning. Increasing literacy rate is the main area of concern and need of the present time. The definitions of literacy may vary from country to country. According to the most acceptable definition presented by UNESCO, adult literacy is defined as “The percentage of people from ages 15 to 24 years who can read and write a short and simple statement with understanding in their daily life” (UNESCO, 2014).

Education affects the growth in society both directly and indirectly. The direct effects include imparting of knowledge, skills and training that is linked to higher wages. The indirect or external effects include accomplishment of basic needs, higher levels of autonomous participation, greater utilization of health facilities, shelter, water and other basic necessities that help to achieve fertility, family abundance and health. This mechanism leads to reduce poverty level (Jeffery, 1996).

Many researchers highlighted the effect of education in accelerating economic growth. Poverty rate goes down with the increase in literacy rate. Poverty is more concentrated in illiterate households in developing nations (Graham, 2002). Similarly Tether (2005) found an inverse relationship exists between poverty and education in case of India. Lower literacy rate hinders progress in developing countries. This can be summarized by understanding that poverty is absent in educated households and its presence is noted in illiterate households. (Tether, 2005)

Poverty in general can be characterized in the context of income; although poverty reflected through income is not a comprehensive measure of the complex phenomenon of poverty. A study conducted by United Nations Development Program (UNDP, 2008) exposed that poverty in human is not only the income poverty but it also diagnosis the degree of shortages in living alternatives for prosperous life. Shortage of education is one of the noteworthy examples to reflect poverty of education. Therefore, poverty of education translates into a significant gauge of human poverty (Espen Dahl, 2009).

According to Arnall (2010), there are many indicators to measure poverty. Historical researches suggested that education is one of the most significant measures of poverty rate. Many researchers have concluded that the most important requirement is to enhance the quality and access to education. Recently, education is not the main area of concern for social, political and economic plans made by the policy makers of Pakistan, India and Bangladesh. But it is given secondary importance in South Asian development programs. They focus more on basic education that includes female, adult and basic education. Poverty cannot be eradicated completely from any country unless and until illiteracy rate of children is controlled (Arnall, 2010).

The objectives of the present study are to investigate the long and the short run relationship between poverty and literacy rate in Pakistan.

Theoretical Framework

In South Asia, more than 400 million people are categorized as poor and they constitute 40% of world's most deprived population. Due to illiteracy present in the human capital the pace of development is slowed down in SAARC region. Lack of access to education is the main factor contributing to the economic instability of the region. To get targets of Millennium Development Goals (MDGs), India, Pakistan and Bangladesh should pay more attention to education sector and take appropriate policy actions to achieve MDGs by the year 2015. (Schuartz, 2010). There are three major effects of poverty on education status. First effect is from the financial side, second is the social stress faced by the poor students and last is the deterioration of educational standards due to poverty. Broadly speaking, usually poor countries have lower literacy rates and at individual level also, the poor children have less access to quality education. Out of more than 6.5 million children, about 80% of them have never been to school in Pakistan (UNESCO, 2014). Economic and non-economic constraints of these high figures include child labour and gender discrimination in education. Incomplete knowledge of religion is also a major barrier to education particularly among females. Unfortunately Pakistan has the second highest number in the list of out of school children where more than 60 per cent population lies below national poverty line. It is evident that literacy and poverty have strong bidirectional relationship at individual and national level (Special, B, 2008).

Human capital theory links literacy and poverty in agreement that poverty is reduced by education or education can help in the betterment of status financially and otherwise also. Millennium Development Goals (MDGs) includes education for all and poverty reduction both due to their immense importance. No nation can progress without removing poverty and illiteracy from the country. Intuitive logic, empirical and theoretical reasons establish strong relationship between poverty and literacy and its roots are partly in the neo-classical human capital theory (Schultz, 1961). It is well accepted phenomenon that greater prevalence of poverty is found among illiterate and less educated households. Therefore, poverty is due to low level of education and consequently prevalence of poverty lead to low level of education and low level of human capital. In this scenario poverty is considered both cause and consequence of low levels of human capital. Under these conditions, household welfare is not maximized. The type of relationships among household welfare, their capital stocks and investment in further education are important to explain intergenerational transmission of poverty and literacy. Therefore, to link poverty with literacy is significant to policy-makers to improve education and curtail poverty for sustainable development (Colclough, 1994).

Literature Review

Afzal et al. (2012) explained education as a multidimensional procedure of development. Not only it accelerates the economic development but also shrinks the poverty and increases the productivity. Poverty is significantly related to economic growth and education of the country. They utilized time series data of Pakistan on poverty, education, physical capital and economic growth from

1971-72 to 2009-10. The ARDL was used for estimation. The positive and significant short run as well as long run relationship was found between physical capital and economic growth. Education was found to have significant positive association with economic growth in the long-run only. While it was found that poverty in the long run has negative relation with economic growth. Bi-directional causality between poverty and economic growth, education and economic growth, and between poverty and education was found with the help of Granger Causality Test. The study recommended pro-poor growth in education and suggested that strategies which will help to reduce poverty and enhance education may be implemented to achieve economic growth in Pakistan.

A Riaz (2011) estimated the poverty variables and their impact on education and unemployment. Annual data from 1974-2009 was included in the research. Methodology involved bonds testing co integration approach to find the long as well as the short run association among variables. The findings showed strong impact of independent variables over the poverty in the long and also in the short run for Pakistan. They further concluded a positive impact of education over poverty and inverse relation between education and unemployment. The growth of country reduced in the long and also in the short run. Inflation rate was found to be insignificant in the research.

Sattar (2012) analyzed the educational structure of Pakistan by undertaking sociological observations including the adult literacy cost of learning, squat enrolment rate, urban rural disparities, lack of concerns of parents and huge drop out ratio. She analyzed the schools associated with BISE Multan, Pakistan. Both secondary and primary data was taken from Human Development Centre (HDC), Economic survey of Pakistan and by interviews respectively. It was concluded that decentralized management, assessment system and expensive education are a major element that affects the basis of education sector in the country. She recommended sufficient organizational facilities, strong strategies, equity and consistency in educational sector, strong and plentiful involvement of stakeholders to decrease damaging effects of the variables.

Hassan and Ahmed (2008) found education impacts upon economic well-being in Sub-Saharan Africa. They employed different variables to measure education. The variables included literacy rates, human capital measure (product of life expectancy at birth) and primary and secondary enrolment rates of learning. Time series data of 31 years over the period 1975-2005 was collected using the secondary sources like databanks on CD-ROM of World Banks in Africa, World Banks World development indicators, internet associated data banks and United Nations. Pooled panel data regression and Panel data fix effect method were the techniques that were employed in the study. They concluded that growth rates of GDP per capita have direct relationship with all the human capital variables. On the other hand, the direct and important association among the variables of growth and human capital showed that education only is not a determinant of growth. There was a strong evidence of relationship between these variables. They suggested that access to education is more important villages as compared to the cities. The result did not highlight this difference. Further they stated that past studies confirmed that investment in general education was more important as compared to vocational education.

Cooray (2009) investigated the impact of worth of education and years of schooling on GDP. He used cross sectional methodology from underdeveloped and developing countries and included dummy variables in the research. The results suggested that total school life expectancy when calculated by enrollment rate was found to have significant impact. On the other hand, the government spending on education had indirect effects on the betterment in educational quality. The author recommended that policy makers should focus on the training courses of teachers, increasing school life expectancy, reducing pupil-teacher ratios and test based appraisal system to accelerate economic growth (Cooray A. V, 2009).

Mursa (2007) found positive association between level of education and employment level. It was found that the main reason of unemployment were lack of abilities, education, skills and awareness. He stated that economic growth was directly related to education because it enhanced productivity. He concluded that less educated work force were not preferred by employers because of lack of knowledge and skills. It was concluded that more qualified employees had cooperative benefits over less educated ones and they were offered high salaries and compensation packages by the employers. They concluded that many organizations preferred high qualified people as they were more knowledgeable and higher qualification increased the probability of employment.

Abbas (2008) examined the effect of education level on income in Pakistan. He took cross sectional data of Pakistan for the years 1998-2004. Under education was considered as a temporary phenomenon. The results concluded a correlation between work experience and level of education which stated that more qualified people had little experience. It was further concluded that male workers had higher salaries when measured with the help of mean and mode index as compared to the female workers that means more qualified male workers had comparative advantage over the others in the job market of Pakistan.

Okubal (2005) examined the role of Government spending on education, economic development and human capital. He took secondary data from Uganda and applied econometric techniques like Error Correction Method (ECM), Cointegration and time series modeling. Human capital was measured by average years of education. The results concluded a direct and significant association among the variables in long run and also in the short run. The author recommended that increased government spending on education sector would enhance the educational quality. He further recommended that private sector should be encouraged to invest in the educational sector to contribute in the pace of economic development.

Data and Methodology

This research study presents the long and the short run relationship between poverty and literacy rate in Pakistan. The data consists of adult literacy rate above 15 years of age and population below national poverty line (all measured in percentage) of Pakistan is used in the study. Poverty rate

in this study served as dependent variable while adult literacy rate is taken as independent variable. Secondary data is taken for the period of forty three years i.e. 1971 – 2013 from World Development Indicator (WDI). The data is checked for stationarity and later on Johansen co integration test, VECM and Wald Test are applied.

Stationary and Non Stationary Series

Firstly, test of stationarity of the time series data is carried out. If the mean, variance and co variance of time series are constant over time then it is known as stationary. The time series data properties can be investigated as its stationarity using the Dicky-Fuller unit root test. Unit root test can be used to test the stationarity of any process. Consider the following three different kinds of random walk process:

$\Delta Y_t = \delta Y_{(t-1)} + \varepsilon_t$ Y_t is random-walk.

$\Delta Y_t = \beta_0 + \delta Y_{(t-1)} + \varepsilon_t$ Y_t is random-walk with drift.

$\Delta Y_t = \beta_0 + \beta_1 t + \delta Y_{(t-1)} + \varepsilon_t$ Y_t is random-walk with drift and trend.

Where 't' represents the time or trend variable. In all the above cases, the null hypothesis is that there is a unit root, $\delta = 0$, $\delta = \rho - 1$, it means that there is a unit root and there is non-stationarity in time series. Alternate hypothesis is $\delta < 0$, i.e. time series is stationary. The probability of alternate hypothesis i.e. $\delta > 0$ is cancelled out. It is due to it $\rho > 1$ which is not possible (Dickey & Fuller, 1979).

The monumental work on checking for a unit root in times series data has been done by Dickey and Fuller (Dickey & Fuller 1979). It is continuity of Dickey Fuller (DF) test based upon the assumption that error term is uncorrelated. ADF test is used by augmenting the lag value of the dependent variable to remove the autocorrelation if exist. Then ADF test consists of estimating the following equation.

$\Delta y_t = \alpha + \beta t + \gamma y_{(t-1)} + \delta_1 \Delta y_{(t-1)} + \dots + \delta_{(p-1)} \Delta y_{(t-p)} + \varepsilon_t$(1)

Here α is constant and β is time trend coefficient while p is lag order of autoregressive process. Applying $\alpha = 0$ and $\beta = 0$ refers to estimating random walk, while $\beta = 0$ refers to estimating random walk model with drift.

Suitable Lag Length

After establishing the stationarity of the variables, VAR model can be estimated in order to find the number of lags in the model. According to Akaike Information Criterion (AIC), Final Prediction Error (FPE), Hannan-Quinn information criterion (HQ) and Sequential modified LR test statistics lag (1, 2) is appropriate for model. Moreover, our study model with lag (1, 2) also goes through from all the diagnostic checking and satisfies all stability conditions. Before the estimation of VECM model, number of co integration equations has to be determined.

Johansen Cointegration Test

Co integration among the variables can be find out by using different methods available in literature. Augmented Engle Granger (AEG) and Engle Granger (EG) and tests are used in case of two variables. Two variables are said to be co integrated if the estimated error term is stationary at level according to EG and AEG tests. However, for estimation of long run relationship among poverty and literacy rate, Johansen co integration test is used which shows long run relationship among variables based upon maximum eigen value and trace test. Johansen explained two tests for testing co integration. These tests are: maximum eigen value test (λ -max) and the trace test. The λ -max test is given as:

λ -max $[H1(r-1) | H1(r)] = -T \log(1 - \lambda r)$ for $r = 0, 1, 2, \dots, p-1$. The null hypothesis is that there are r co integrating relations against alternative hypothesis of $r+1$ relation. The trace test is given as: λ trace $[H1(r) | H0] = -T \sum_{i=r+1}^p \log(1 - \lambda_i)$. Here in this test null hypothesis is that $\lambda_i = 0$ against the alternative hypothesis that it is not zero. Therefore, the only first r eigen values are non-zero. It is more appropriate to use trace test as it is found that trace test is robust to skewness and excess kurtosis. This test is also adjustable for degrees of freedom in case small samples. T in the trace statistics may be replaced by $T-nk$ according to Reimers (1992).

Error Correction Model

To explain short run relationship between poverty and literacy rate, error correction model is used. The error correction mechanism is represented as: $\Delta y_t = \alpha + \beta \Delta x_t + \gamma(x_{t-1} - y_{t-1}) + u_t$ (1) where $\Delta x_t = x_t - x_{t-1}$ and γ shows the error correction term and it is the speed of adjustment due to deviations from long run equilibrium which are corrected in the short run. This error correction specification explains the change in dependent variable is linked to the change in independent variable or may be more than one independent variables (as in our case, we have only one independent variable i.e. the literacy rate) as well as the error term of the previous period. This is represented as: $(x_{t-1} - y_{t-1})$. This representation shows short run relationship among variables. Error correction models are used to estimate

Short run effects of X on Y

Long run effects of X on Y and

Speed at which Y come back to equilibrium in short run after a deviation in long run.

In equation (1), when $y_t = y_{t-1} = y$ and $x_t = x_{t-1} = x$, the long run static solution is attained. This solution is given as: $y = x + \alpha / \gamma$.

Results and Discussion

All the variables poverty (P) and literacy rate (L) got stationery at first difference with trend and intercept. DP is the first difference of poverty and DL is the first difference of literacy rate. The results with first difference are given table 1.

Table 1
Results of Unit Root Test

Variables	Critical Values	t-Statistics	Prob.
DP	-3.53	-6.156	0.000
DL	-3.53	-5.339	0.001

It is concluded that poverty and literacy rates are stationary at first difference. Therefore, the order of co integration is 1 i.e. both poverty and literacy are stationary at the same order. To find out long run relationship between the variables, Johansen co integration test is used. The table 2 and table 3 show the results of co integration.

Table 2
Unrestricted Co integration Rank Test (Trace)

No. of CE	Eigen values	Trace Statistics	Critical Values	Prob.**
None*	0.271	16.510	15.495	0.035
At most 1*	0.092	3.864	3.841	0.049

Note: * denotes rejection of the hypothesis at the 0.05 level and
** MacKinnon-Haug-Michelis (1999) p-values.

Therefore, trace test indicates two co integrating equation at 0.05 per cent significance level.

Table 3
Unrestricted Co integration Rank Test (Maximum EigenValue)

No. of CE	Eigen values	Max Eigen statistics	Critical Values	Prob.**
None	0.271	12.646	14.264	0.088
At most 1*	0.092	3.864	3.841	0.049

Note: * denotes rejection of the hypothesis at the 0.05 level
** MacKinnon-Haug-Michelis (1999) p-values.

Therefore, maximum eigen value test indicates one co integrating equation at the 0.05 percent level of significance in table 3.

Johansen approach of co integration is applied to find the number of co integration relationships on the basis of trace statistics and max eigen values. Trace statistics max eigen values are estimated to determine the number of co integrated vector in the model. The null hypothesis is Ho: There is no co integration among variables. The first column is the number of co integration relations under the null hypothesis, the second column is the ordered Eigen values of the model, the third column is the test statistics and the last two columns are the 5% critical values. If p value is lower than 5% or critical value is less than t-stats then as per rule Ho is rejected.

From the table 2, trace statistics 16.5 is greater than the critical value 15.4 with p value 0.03. This result shows only one co integration equation at 1% level of significance. Since p value is lower than 5% and trace statistics is greater than critical value so Ho is rejected. It means that there is co integration among variables that shows long run relationship between poverty and literacy rate. The results of co integration suggest one co integrating equation keeping in view the trace test as well as maximum eigen value test.

The Johansen long run equation is given in table 4.

Table 4
Johansen's LR Equation

P	L
1.00	0.759
	(0.072)

Table 4 provides the normalized co integrating coefficients and their standard errors are given in parentheses. The estimate shows significant long run relationship between poverty and literacy rate and shows that both variables move in opposite direction. The normalized equation can be rewritten as: $P = 0.759L$. It shows literacy may be changed by 0.759 per cent due to one per cent increase in the poverty rate. To find the short run relationship among poverty and literacy, VECM is applied

$$\Delta P_t = \alpha_0 + \alpha_1 \Delta L_t + \alpha_2 U_{t-1} + E_t$$

$$\Delta P_t = -0.17 - 0.75797 \Delta L_t - 0.1246 U_{t-1} + E_t$$

Lag (1, 1) is appropriate lag length. Error correction has good signs. And AR root model shows model

stability. So the table satisfies VAR is stable.

Table 5
VECM Results

Error Correction	D(P)	T STATS
CointEq1	-0.125	-2.211
R ²	0.183	
Adj. R ²	0.115	

The table 5 shows the results of VECM. The dependent variable in the short run is the difference of poverty and is denoted by D(P). The estimated coefficients are not significant. Therefore, we reject the short run relationship among poverty and adult literacy rate. In the short run, literacy has no impact upon the poverty reduction.

Conclusion and Recommendations

The study investigates the short and long run relationship between poverty and literacy rate in Pakistan. The data of poverty and adult literacy rate for the period from 1971 to 2013 is used in the study. The stationary of time series variables was checked with the help of Augmented Dicky Fuller unit test. The variables were stationary at first difference. The long run relationship was checked with Johansen co integration techniques. The result show the long run relationship between poverty and literacy rate and explain that poverty can be reduced by 0.759 per cent by increasing one per cent literacy rate in the country.

Furthermore, ECM explains the short run relationship between poverty and literacy rate in Pakistan. The results show no short run relationship between two variables. The findings of research study suggested that public as well as private sector should pay due attention on the short as well as long run solutions of poverty elimination. The study recommends pro-poor growth and also education in Pakistan.

As there is clear evidence that education can lesson poverty but it is just one of various factors that hinder the availability of education. In order to decrease poverty rate it is important not only to enhance access to education but also to highlight the importance of education. Poverty is just one of the basic factors restraining learning through education. Education is critical for poverty reduction and improvement in standard of living.

The interdependency between the variables suggest that policies should be formulated that would enhance education and literacy rate in the country for long lasting. Millions of children start school but finally drop out. In Pakistan countries, School systems are continuously underfunded and they lack sufficient funds so they are unsuccessful in providing better facilities. Expenditure on education is crucial for economic growth and ultimately poverty reduction in the country. Education helps in Poverty reduction and economic growth individually as well as collectively. Also poverty reduction plans are more effective if the beneficiaries are more educated.

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SOCIAL MEDIA AS CONDUIT FOR WOMEN ENTREPRENEURS IN PAKISTAN

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Abstract

This study aims to recognize the impact of social media on women entrepreneurs in Pakistan, contrary to the present literature primarily on large-magnitude social media endeavours. It focuses to identify whether social media is offering a platform to micro-scale women entrepreneurs to solely conduct their business through it or is it serving only as an auxiliary mean to the conventional medium, while identifying the related advantages, challenges and disadvantages. A qualitative method i.e. semi-structured interview has been used to identify women entrepreneurs' own insights, experiences and emotions. The results have revealed that social media has provided a platform to the women in Pakistan who cannot do a job or business through a traditional medium, primarily because of social and financial constraints. It has offered them momentous benefits including large market access, direct messaging, inexpensive and swift information sharing and flexibility. Women entrepreneurs highlighted imitation of genuine products, unfair price rivalry and trust issues as the prominent disadvantages of conducting business through social media. The study also made an interesting revelation that although Facebook is a widely used social medium; it is gradually losing its position to other topical social networking site i.e. Instagram, because of its comparatively inexpensive and more engaging interface.

Keywords: Social Media, Women Entrepreneurs, Micro-Scale Entrepreneurs, Pakistan.

JEL Classification: Z000

Introduction

Women count approximately 50% of the total population in Pakistan. However, according to Labour Force Statistics (2014-2015) the female labour participation rate is only 15.8%. According to a global survey, women's earnings have also been reported to be almost half those of men⁴. Predominantly

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⁴ Forbes (2016, Oct 27). 7 Important Facts About The Global Gender Gap. Retrieved from <https://www.forbes.com/>

Eastern traditions are still being followed in Pakistan where men are considered as wage earners and women as homemakers (Sadiq & Ali, 2014). It is common to see that women leave their jobs and serve their families at home after marriage, while those working in paid jobs have the toilsome task of managing between work and household responsibilities (Davendran, 2008). They are burdened with domestic responsibilities along with office work (Tripathi & Bhattacharjee, 2012).

Internet has opened up the doors of opportunity in many ways. This era, called as the technological era, has greatly altered the way businesses used to carry out their dealings, through enhancing efficiencies and creating supreme prospects for entrepreneurs (Ramadan et al., 2013). Social media has gained popularity among businesses by having considerable influence on their functions and success, with major contribution of online interactions, which offers the opportunity of substituting physical dealings with the virtual ones, as confirmed by the fame of networking sites such as Facebook and LinkedIn (Barnes et al., 2012).

In Pakistan, brisk escalation in the usage of social media is prominent for the last few years. Pakistani users on Facebook, the most used social media, have crossed the mark of 19 million users with a 72% rise since January 2014⁵, thus corroborating its fame. It has opened the doors for small scale young entrepreneurs to open business through this platform, especially for women. They have made their profile pages with details of their business and products. Uploading of items' snaps, regular updates about price cuts, new arrivals and regular answer of queries have made it laudable business medium. Ezmieralda et al. (2015) have identified in their study that the key benefit it has offered is liveness; enabling women to pursue their business from anywhere at any time, while balancing their other home and family based obligations too.

Existing literature has mostly focused on 'large scaled social media campaigns' (Genç & Öksüz, 2015). Contrary to it, the endeavour of this article is to present how social media is contributing to boost micro-scale women entrepreneurship in Pakistan, whether it acts as an opportunity for them who cannot perform business through usual means because of certain monetary, social and systemic challenges or it is only helpful as supporting digital mean to conventional media, with a major focus on identifying the opportunities it has offered and the challenges which these entrepreneurs face while carrying out business through social media.

⁵ Kemp, S. (2015). Digital, Social & Mobile in APAC in 2015. Pakistan Advertisers' Society. Retrieved from <http://www.pas.org.pk/digital-social-mobile-in-apac-in-2015/>

Literature Review

Social Media as a Communiqué Tool

Social media is a medium for social interface. Social media is about “the means for any person to publish digital, creative content; provide and obtain real-time feedback via online discussions, commentary and evaluations; and incorporate changes or corrections to the original content”.⁶ Social media as compared to traditional media allow real time communication, where people can be both, information creators and receivers, without time and location constraints (Kim & Ko, 2012). This medium has offered a substantial opportunity for the growth of business related activities through business exposure, growing traffic and offering market information (Stelzner, 2012).

People talk on the internet about the products and services they have used or experienced, whether they have liked it or not, sharing the good as well as bad experiences. Two third of the total conversations are actually about a product, brand or service⁷. Two way communications, the dominating feature of social media, has enabled especially the small entrepreneurs to build closer and profitable relationships with customers (He & Chen, 2014).

Social Media and Entrepreneurship

Entrepreneur is the one who organizes, administers and assumes the perils of a business. It may include the creation of a new venture, innovation and also the management of new venture (Mosted, 1991). The statement, ‘Social media influence entrepreneurial drive’ is accepted widely now. Social media gives access to the resources that may be difficult to attain through the formal means. The success of small businesses is dependent on building ‘committed’ relationships, and social media provides opportunity in this regard (Schaffer, 2013).

There is a gradual surge in the use of social media. According to a report by HuffPost, social media usage has increased substantially around the world, with 4.2 billion monthly active social media users by 2016⁸. This increasing social media permeation has not only gathered attention of businesses but has also tempted customers towards it. People are moving towards online shopping from the traditional means because it is convenient, economical and time saving⁹. By using social

⁶ Dykeman, D. (2008). How do you define social media? Broadcasting Brain. Retrieved from <http://broadcasting-brain.com/2008/02/09/how-do-you-define-social-media/>

⁷ Hubspot. (2012). 120 Marketing Stats, Charts & Graphs. Retrieved from <http://hubspot.com>

⁸ HuffPost (2017). Social media by the numbers [Infographic]. Retrieved from http://www.huffingtonpost.com/piyush-mangukiya/social-media-by-the-numbe_b_9757926.html

⁹ eBay. (2013). Advantages of Online Shopping and its Disadvantages. Retrieved from <http://www.ebay.com/gds/Advantages-of-Online-Shopping-and-its-Disadvantages-/1000000177896151/g.html>

media, people are connecting to hundreds of people at a time, where they can spot the needs of their customers, the changing trends and instant feedback. Social media has not only affected the youth and the old generation alike. Facebook has been identified as the most used social media tool. It is preferred by most of the small entrepreneurs because of its simple and friendly user interface as compared to other channels such as Blogs, Google+ and LinkedIn. The growth of social media, majorly contributed by Facebook, Tumblr and recently by Instagram¹⁰ has opened new paths of communication, enabling consumers to share information by its user-generated feature (Mangold & Faulds, 2009). Although the internet users and online shopping has increased yet the confusion still exists and many people are hesitant to purchase products or avail services through online means because of the security and privacy concerns (Rehman et al., 2011).

The usage of e-commerce in developed countries is at its peak, but in case of developing countries like Pakistan it is still on the lower side. Lawrence and Tar (2010) have also realised in their study that developing nations are lacking the essential conditions to support internet usage, which has huge latent as a tool for progress.

Social Media and Women Entrepreneurs

The world has never witnessed such vibrant change in technologies, economies and societies as it is now (Kose & Ozturk, 2014). At the same time, world has admitted that entrepreneurship and particularly women entrepreneurship is vital for the economic growth and poverty diminution in a country (Shah & Saurabh, 2015). Women's involvement in economic activities has become a benchmark for economic progress in developing countries (IMF, 2013). For the last few years, the number of women who are self-employed has increased exponentially. Women entrepreneurship significance has increased not because of the economic strain on the only breadwinner at home but because of the fact that women have now more access to better information channels and have enhanced desire for self-actualization as compared to the past, which has enabled them to earn for themselves and their families with a sense of self-worth, while also catering their social and religious compulsions (Melissa et al., 2015).

One of the most prominent features of this new business context is flexible working, allowing women to increase their share in the workplace. Social media has offered enough benefits to women entrepreneurs to pursue their businesses successfully, including fast and cheap information disclosure, display of the photos and videos of products without any cost, wide networking and instant messaging (Genç & Öksüz, 2015). It is claimed that flexible working facilitate women to take care of their children too, thus plummeting their stress and making them more prolific and contented with

¹⁰ Adler, E. (2016). Social media engagement: the surprising facts about how much time people spend on the major social networks. Retrieved from Business Insider: <http://www.businessinsider.com/social-media-engagement-statistics-2013-12>

their jobs (Hill, et al., 2008). Beninger et al. (2016) have also concluded in their study that overall the social media has constructive impact on the lives of women entrepreneurs, both professionally and personally.

Women in developing countries like Pakistan still have to face many obstacles in planning and starting their own business and that is the reason that women entrepreneurs' percentage is still low; this low percentage can be attributed to strong gender stereotypes, cultural values, norms and limited access to capital and developmental opportunities¹¹. In rural areas, a woman's principal responsibility is to look after her husband and children, with no permission to start her own businesses or to start a job that involves dealing with men¹². Women around the globe are generally involved in low paying jobs requiring lesser skill. There is a huge gender disparity regarding communal and legal protection in the country causing marginalization of women¹³. President Women Entrepreneurs Association of Pakistan has claimed that 95% of the women in Pakistan are unable to fully comprehend their potential¹⁴.

Researches have proved that greater women employment can lead to rise in GDP considerably¹⁵. The growing technological awareness in Pakistani women has opened a door for their well-being by socializing and earning. In Pakistan, the women who have taken the initiative to work through e-commerce are taking the help of social networking sites (Shabib & Fatima, 2012). According to World Bank the number of self-employed women of the total working women in Pakistan is 78% in 2008, which is second highest among the Muslim nations¹⁶.

A recent report by Business Insider Intelligence has revealed that women consumers excel men in making research and purchasing merchandise online¹⁷. Women have also taken benefit of the

¹¹ Jamal, N. (2015, March 2). Grooming Women Entrepreneurs. Retrieved from DAWN: <http://www.dawn.com/news/1166705>

¹² Women life in rural Pakistan. (2015, July 13). Retrieved from The London Post: <http://thelondonpost.net/women-life-in-rural-pakistan/>

¹³ PPAF. (2013). Poverty Perspectives. Islamabad: Pakistan Poverty Alleviation Fund. Retrieved from http://www.p-paf.org.pk/Poverty_Briefs/IssueIIINovember-2013.pdf

¹⁴ PWEAP seeks business leverages, exemptions for businesswomen. (2015, April 18). Retrieved from The Nation: <http://nation.com.pk/business/18-Apr-2015/pweap-seeks-business-leverages-exemptions-for-businesswomen>

¹⁵ Hewlett, S. A. (2012). Harvard Business Review, More Women in the Workforce Could Raise GDP by 5%. Retrieved from <https://hbr.org/2012/11/more-women-in-the-workforce-could-raise-gdp/>

¹⁶ Mundi, I. (2008). Pakistan - Self-employed. Retrieved from Index Mundi: <http://www.indexmundi.com/facts/pakistan/self-employed>

¹⁷ Smith, C. (2015). The surprising facts about who shops online and on mobile. Business Insider. Retrieved from <http://www.businessinsider.com/the-surprising-demographics-of-who-shops-online-and-on-mobile-2014-6>

prevalent situation and have initiated their own online businesses to meet their financial needs. Information and communication technologies have enabled women entrepreneurs to work under more elastic conditions, leading to equilibrium in the personal and professional obligations more lucratively (Ezmieralda et al., 2015).

Research Methodology

Data Collection Method

The study is a cross-sectional study where the data has been gathered from the respondents at one point in time. As like in most studies, cross-sectional study has been opted over longitudinal study due to resource constraints (Sekaran, 2003). The sample of small scale women entrepreneurs carrying out business on social media has been derived through snowball sampling technique as it was difficult to recognize the members of the desired population (Saunders et al., 2009). This method enabled to reach the most appropriate respondents for the study.

Data Collection Process & Interpretation

Considering the intent of the study which is to identify the purpose, strategies and means that small scale women entrepreneurs take on to pursue their work and identifying the opportunities and challenges they tackle during this course, particularly regarding carrying out business through social media, qualitative approach; semi-structured interviews have been opted. When the purpose of a study is to discover from the respondents the way they experience in a particular setting i.e. understanding women entrepreneurs' own emotions and insights about their social media usage in this study, qualitative methods are highly appropriate (Atieno, 2009). NVivo software has also been used to assist in interpretation and to find insights into the collected qualitative data.

Instrument

The semi-structured interviews have been carried out by adapting questions from the existing studies based on women entrepreneurship and impact of social media (Genç & Öksüz, 2015; Melissa et al., 2015). These studies have also employed qualitative methods i.e. semi-structured interviews and focus group discussions to gain enhanced insights to women entrepreneurs' perceptions, attitudes and experiences.

Pilot Study

Pilot study has been carried out to validate the effectiveness of the instrument serving as guide for semi-structured interviews. Pilot study involved two language experts, three academicians and two micro-scale women entrepreneurs. Participants were selected on the basis of convenience;

however care was taken to ensure that the members have the desired characteristics vital for the study.

Sample Size

The sample consists of six micro-scale women entrepreneurs conducting business through social media.

Findings

Respondents' profiles

Among the interviewed women entrepreneurs, four are between the ages of 20-30 and two are of 30-40. Most of them have high education level; three declaring to have obtained a master's degree, two having a bachelor's degree and one with an intermediate. Two of the respondents are married, the rest four are unmarried. In addition, the information regarding their business revealed that all of them use social media professionally, with two of them selling customized handicrafts and gift items, three of them are in business of selling stitched clothes to women and one is a professional make-up artist, all with an experience of average three years.

Social media, an open business mean

All of the respondents have indicated that they started business with a small investment, particularly from their own savings or from the support of their family. Advance payments for order processing do not demand heavy investments from the entrepreneurs. The biggest attraction behind starting a business through social media was absence of infrastructural cost. A fashion designer emphasized this by saying that 'I wanted to start my fashion designing business, but if I opted for my own physical outlet, it was costing me two million rupees. Then why not, one should opt for an online medium, which is offering the business opportunities in lower budget'.

Another dress designer also accentuated the benefit by saying that 'I didn't have much financial resources to start my own physical outlet. And even if I had started, the ratio of loss will be much more than what I borne initially in my business through social media. Facebook is a cheap resource for small entrepreneurs.'

All of the respondents are working informally, i.e. from home and using social media to have their virtual business outlet, however planning to have their products being displayed at multi-brand stores. Most of them work on their own; only two entrepreneurs claimed to have employed 5-6 workers/tailors of their own lately after they had earned sufficient savings from the business to triumph over the hassle of dealing with the tailors in the market.

The basic motivation behind entrepreneurs' business was their interest and passion to do something on their own, i.e. self-actualization and secondly, financial gain. Among the married participants, quitting job to look after their children and family served as a catalyst to start an online business, particularly on social media. Social media offered a mean to socialize and run their business while at the same time being present for their families and household responsibilities. As a married dress designer revealed that, 'I was doing job before marriage. I had the habit of earning and enjoyed having my own money. Then I had a daughter, the gap of two years made me feel dull. The platform of social media offered me an opportunity to be an entrepreneur, where I could also give time to my daughter and domestic responsibilities, as it's my own work.'

However, all of the respondents have admired that in the last few years the trend of online shopping has increased significantly, especially among women. This increasing trend is followed by a boom in social media usage for the purpose, allowing virtual sharing of pictures, conversation and interaction.

Advantages

The prominent advantage which every participant quoted is large and easy market access through social media. Even if they have a physical outlet, they can't be in access to customers from different cities, even countries that the social media has enabled access to. As a dress designer who started her work four years back quoted, 'When I started, I was expecting that I would not get many customers in Pakistan through social media but it was contrary, I got good market access and the main credit goes to women here, who are shopaholic.'

Social media has offered them a platform to display their creations and offerings through pictures and videos. Continuous and quick information disclosure and feedback through instant messaging and comments on posts has added efficiency in operations of the entrepreneurs. Sharing the pace of an order's processing along with pictures on social media allow both the customer and the entrepreneur to get the desired product, saving them from the post-creation botheration. As a dress designer said that, 'Fast feedback through sharing of pictures has reduced the hassle by allowing us to change anything if not according to the customers' expectations.'

Another advantage that social media has offered to these women entrepreneurs is promotion of their business through their clients by adding reviews on their business pages and also through word of mouth.

Challenges & Disadvantages

With loads of opportunities and advantages that social media has offered, without any exemption all women entrepreneurs also face challenges to pursue their business. Starting business

through social media is cheap, but practising it through a virtual mean has its own setbacks. The major issue on which all participants agreed was related to trust. Customers interact virtually, view pictures, share their own, and place orders with the entrepreneurs. Work is judged through the posts on social media, as physically the samples are not available, which sometimes results in complaints from the customers that the product created is not according to what was shown. As a handcrafter while discussing this issue said, 'People judge your work and level of creativity on the basis of pictures and later complain that you have changed the product. Two times customers were like return our money; we don't want to buy the ordered product. I had to convince them, as profit margin is already low that I wanted return for my time, effort and money.'

The same issue was highlighted by the other handcrafter too. She said, 'Making people understand in a customized product business is sometimes really difficult through a virtual mean. They see from their own perspective, and gaining trust gets tricky. However, I have to accommodate them, in order to retain them.'

The easy access to market through social media has equally opened doors for the less qualified people, who imitate the genuine creations of entrepreneurs for significant lower prices, creating unjust price competition and also creating confidence issues for the genuine buyers. All the dress designers quoted this issue. As one stressed the point by saying, 'Imitation has created problems for authentic creators like us. Replicas are of low cost, apparently with the same looks of the genuine ones and thrifty people go towards them. But it is Facebook world, we can't stop it.'

Similar issue was highlighted by the make-up artist, who puts her makeup videos and pictures on Facebook and Instagram to get customers. She said, 'There are many people who are doing fake work by copying and sharing work of others. They edit their pictures and videos to capture the market. This has created doubt in minds of customers and when they interact, they seem confused about genuineness of your work. To convince people sometimes gets difficult.'

A dress designer while quoting the disadvantages of doing business through social media identified that dealing with customers through online medium is really tedious and time consuming. She said, 'Dealings through social media demand more communication and interaction from the seller but response is comparatively less than a physical trade. However, this issue can be countered to some extent, but cannot be avoided.'

Aspect of cyber crime has also been highlighted by a women dress designer as one of the immense drawback of selling products online, as it can pose a great threat to the repo and even life of an online business. She added that, 'My business page was flourishing at a good pace. But one day I failed to log in to my business page; someone hacked my account. My orders information, page followers and even my business, everything felt at stake. I approached my friend who is an IT Specialist. He helped me to recover my account and also added security features to protect my page from

future attacks. The hacker tried to manipulate my customers by sending vague messages and asking but Thanks God my customers trusted me. It is necessary for every entrepreneur in social media world to add enough security features to remain safe from such criminals and stay in the business.’

Instagram, an emerging social networking site

Facebook has been identified as the prime mean of marketing communication by the participants, but the results have revealed that it is losing its worth among the entrepreneurs to the other rising social medium, Instagram. Among the six participants, four identified it as more effective because of the feature of ‘hashtaging #’, which allows for more marketing communications. The changing policies of Facebook including sponsorship concept has limited the content viewing by most of the fans on the business pages. The entrepreneurs can’t get enough viewership unless they pay to promote it. However, Instagram is still offering these perks free of cost. A dress designer, who has been on social media for four years remarked, ‘I am doing more of the business through Facebook, but now looking to use Instagram more for the purpose. I have around 28,000 fans on my Facebook page. But, if I upload a post, it is visible to only a limited number of fans. Facebook has limited content viewing by introducing the concept of sponsorship, which demands paying for it. Instagram, however still conserves its feature of being free of charge.’

The two participants said that they preferred Facebook over other social networking sites, credited to its privilege of being more user-friendly and having most users in Pakistan. The other social networking sites including Twitter, LinkedIn, etc have not been ranked famous among the women entrepreneurs in Pakistan.

Discussion and Conclusion

As the literature regarding social media and women entrepreneurship in Pakistani society is still evolving, this study adds to the discussion. The results of the study have confirmed that social media is offering momentous benefits to the women driving them to become entrepreneurs. Where, self-worth, independence and financial gain have been identified as the prime motivators. The same has been identified in a study in Indonesia by Melissa et al. (2015), where women realised social capital, self-worth and financial contribution as the prime drivers of online entrepreneurship. As according to the recent available statistics self-employed women of the total working women in Pakistan is 78%¹⁸, which they opt over formal employment primarily because of lack of enough time, gender partiality, social and cultural limitations and domestic responsibilities (Rehman & Roomi, 2012). Thus, social media entrepreneurship can be seen as a way out to the dilemma encountered by women in balancing their work and family life.

¹⁸ Mundi, I. (2008). Pakistan - Self-employed. Retrieved from Index Mundi: <http://www.indexmundi.com/facts/pakistan/-self-employed>

Furthermore, Facebook has been acknowledged as the principal mean of communication for carrying out micro-scale businesses by women entrepreneurs in Pakistan because of its large-networking, inexpensive and fast information sharing, direct messaging and user-friendly interface. However, following the general trend of declining popularity in comparison to Instagram¹⁹, it is also losing its appeal among the women entrepreneurs primarily because of the sponsorship policy. The ‘hashtagging #’ feature of Instagram has added to its worth, which allows the viewers to view all posts tagged under a particular topic. This is supported by facts²⁰; as facebook’s global reach has declined by 60% since 2012, and that of instagram has risen by 200% because of the facebook’s policy of ‘pay to get viewed’.

Social media though serving as a catalyst for women entrepreneurs is not free of hurdles. Though providing an easy access platform to the sellers and buyers, it has also provided effortless access to the imitators. This increasing trend has also made authentic buyers more conscious about the originality of the products, creating difficulty for the entrepreneurs to win their trust (Genç & Öksüz, 2015). Trust issues are also created by the virtual nature of social networking sites. It sometimes gets difficult for entrepreneurs to gain their confidence about the products’ features and quality, making communications tedious and time consuming than a physical dealing. Cyber crime has also been highlighted as one of the drawback that can pose serious threat to the survival of an online business for women entrepreneurs. This rising negative aspect of social media in Pakistan has been countered to some extent by authorities by implementing Cyber Crime Bill Act in 2016, where culprits have been subjected to imprisonment and/or fine, but still improvements are needed to fully overcome this crime (Geo News, 2016; Khan, 2017). Besides this Federal Investigation Bureau has issued a detailed guide for Facebook users to protect their accounts and pages from the cyber attackers, as weak security on part of the user is the prime cause of various cyber crimes (FIA, 2014).

Thus, the study through its results has added to the evolving narrative of social media and women entrepreneurship in Pakistan where it has confirmed that social media has served as a conduit for women entrepreneurs in Pakistan, who cannot do a job or pursue a traditional business, primarily because of certain social and financial constraints. Hence, confirming that social media is not helpful only as an auxiliary digital mean to usual medium, but solely serve as a platform for micro-scale entrepreneurs to carry out their businesses profitably.

¹⁹ Manjoo, F. (2017). Why Instagram Is Becoming Facebook’s Next Facebook. Retrieved from The New York Times: https://www.nytimes.com/2017/04/26/technology/why-instagram-is-becoming-facebook-next-facebook.html?_r=0

²⁰ Grizzell, N. (2015, September 15). Instagram vs Facebook: 5 Factors to Consider. Retrieved from Agora Pulse: <https://www.agorapulse.com/blog/instagram-vs-facebook-5-factors>

The results have been supported through running interviews in NVivo (Figure 1), which has shown the maximum frequency for words, 'social media and business'; confirming that women entrepreneurs' businesses are linked to the mean of social media. Followed by words 'market, working, informally, customers, access, money, exposure, started, difficult, online, investment, pictures, recognition' sequentially have strengthened the validity of the findings of the study. i.e. women entrepreneurs are capturing the desired market by running businesses informally rather than a formal traditional mean, because of the prime difficulty of having insufficient investment. This online mean has given these women exposure by sharing pictures of their work and an easy access to customers to earn money and even recognition.

Limitation and Recommendation

The study focused on identifying the impact of social media on women entrepreneurs in Pakistan from a broader aspect, contrary to the existing literature which had room regarding disadvantages of social media for micro-scale entrepreneurs (Genç & Öksüz, 2015), particularly in Pakistan. A further study with enhanced sample size can lead to more substantial contribution with improved generalizability of results.

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Appendix



Figure 1: Word Cloud

THE EFFECT OF MANAGEMENT STRATEGIC ORIENTATION ON INNOVATIONS: A CONCEPTUAL FRAMEWORK

Tehmina Latif¹ and Sania Zahra Malik²

Abstract

The study proposes that employees' innovative behaviour in the workplace does not always translate into a significant innovation at the organizational level. A review of innovation literature suggests that management strategic orientation significantly influences the utilization of individual innovative behaviour into organizational outcomes. Among such management orientations, the most critical are the imitation orientation and risk aversive orientation towards innovations. The study also identifies four antecedent factors that stimulate innovative behaviours in employees including harmonious passion, perceived autonomy support, perceived peers' expectations and psychological contract fulfillment, formulating a holistic framework to explain individual and organizational innovativeness. This study contributes to innovation literature by explaining the dynamics of why firms fail to bring innovations in products and services even after evoking the individual innovative behaviour in the workplace?

Keywords: Innovative Behaviour, Imitation Orientation, Risk Aversion, Harmonious Passion, Autonomy Support, Peer Expectations, Psychological Contract.

JEL Classification: M000

Introduction

The flat-out revolution in technological environment calls for efforts to minimize the adverse effect of competition over organization by enacting advanced and distinctive ways of production through innovations (Leifer et al., 2000), which in turn bring new domains, new paradigms and create a potential for major changes (Norman & Verganti, 2014). Keeping in view these facts, businesses pay greater attention to promoting innovations in the organization. Despite of all these efforts, surprisingly,

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directed towards radical innovation fall short of basics (BCG, 2014) and remain deprived of materializing such innovations (Takayama et al., 2002).

Why firms fail to bring innovations? Business environment always remains unpredictable. The effects of unanticipated situations are more indestructible on radical innovation than on incremental innovation projects (Alexander & Knippenberg, 2014). Management often resists implementing ideas that are innovative, believing that an innovation can adversely affect the destiny of their company (Foster, 1986) by damaging previous products or processes. For instance, in 2004, senior management at Nokia Company rejected the proposal from researchers to introduce a large touch-screen smart phone that can be operated when connected to internet, thinking that the risks of failure does not warrant the cost of failure. Later on, in 2007, Apple Company introduced the iPhone with same features that Nokia's managers opted not to pursue. Statistics show that this decision cost Nokia a fall of share in the US smart phones market from 35% in 2002 to 8% in 2010 (Denning, 2010). This attitude on the part of management is becoming an increasing phenomenon particularly in developing countries where many large companies, in spite of having huge investments and resources, are hostage to a few giants who pioneer and control the market. With such risk averse orientation, adoption of imitative strategies becomes a natural response to environmental uncertainty (Lieberman & Asaba, 2006) and management increasingly develop imitative attitude. Employees often become the victim of these strategies. They are forced to adopt whole or part of the competitors' practices even after having the capabilities of bringing and implementing new ideas. Innovative employees, if given opportunity, can change the direction of a business and destine it to the heights of success but the excessive focus of management on competitors and resistance to new ideas and practices may result in failure of a firm to come up with some breakthrough (Lewrick, Omar & Williams, 2011). Mainemelis (2010) argued that employees generate novel ideas but managers stop them from working on those ideas. Dewar, Dutton (1986) and Damapur (1991) found management strategies and attitudes as the most important factors that influence organizational innovativeness. But the evidence of how and why these attitudes and strategies influence organizational innovativeness is understudied.

This paper is an attempt to organize various psychological antecedents such as employees' harmonious passion, perceived autonomy support, perceived peers' innovation expectations and psychological contract that shape individual innovative behaviour which may be further translated into organizational innovativeness. It takes firms' imitation orientation and risk averse orientation as management strategic orientations, which may influence organizational innovativeness by adversely affecting conversion of individual innovative behaviour into organizational innovativeness. Specifically, it is proposed that employees in an organization generate innovative ideas to achieve desired psychological outcomes but the management strategic orientation in the form of imitation orientation and risk averse orientation restrains them from working on and implementing the idea. Most of the previous researches remained focused on determining the factors that may stimulate individual innovative behaviour and organizational innovativeness. Unfortunately, despite the extensive contemporary moves in innovation literature, research on the dynamics of why firms fail to bring innovations

even after eliciting the individual innovative behaviour, continues to be limited and disparate.

A Holistic Framework for Individual Innovative Behaviour

Innovativeness is attributed to willingness to take risks, resources for creativity, and career commitment (Madjar, Greenberg & Chen, 2011). It is a multi-dimensional composite variable composed of radical-ness, relative advantage and adoption (Nystrom, Ramamurthy & Wilson, 2002). Rogers (1983) in his theory 'Diffusion of Innovation', demonstrated that the adoption can be categorized into two sub-processes, imitation and differentiation. Drawing from Roger, the organizations who have high degree of innovativeness try to remain different through radical innovation whereas the followers carry out imitation of adoption. Recent advances in innovation literature describe two levels of innovation, radical (distinctive ideas not existing in competitors) and incremental (adaptations in adoption), along a continuum whereas imitation (perfect copy or adoption of competitor's idea) is expressed on the opposite pole of radical innovation (Jenkins, 2014).

It is widely accepted that successful change in an organizational process can be brought up through engaging the employees in the process of innovativeness (Ramamoorthy et al., 2005). Organizational performance is affected positively by the existence of innovative work behavior among employees because it ensures effective business processes (Janssen, 2001). Individual Innovative behaviour is defined as the intentional introduction or implementation of new ideas, products, processes and procedures by an individual to his or her work role (West & Farr, 1990, 1989). Organizational innovativeness refers to an organization's receptivity and inclination to adopt new ideas that lead to the development and launch of new products (Hurley & Hult, 1998). It indirectly affects firm's value by having an impact on its market and financial position. Discerning the critical role of employees' innovative behaviours for organizational sustainability, a greater effort has been emerged in innovation literature to uncover the factors that foster such behaviours (Agarwal, 2014). Building on the above conceptualization it is proposed that:

Proposition 1: The more the individual innovative behaviour, the more the organizational innovativeness will be.

Harmonious Passion

Passion is defined by Vallerand et al. (2003) as a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy. It provides individuals a motive and an urge to do something that they find most involved in. Vallerand et al. (2003) conceived a dualistic model of passion on the basis of internalization of activity into one's identity. According to which, passion can be categorized into two i.e. obsessive passion and harmonious passion. Obsessive passion is the controlled internalization of activity into one's self and usually results in conflict with other activities on discontinuation. On the contrary, Harmonious passion is an autonomous internalization of activity into one's identity. Keeping with autonomy perspective of

self-determination theory, harmonious passion equips an individual with an opportunity to perform an activity autonomously in such a way that it becomes a part of his/her identity allowing him to get fully involved in the passionate and other life activities with openness that ensures positive experiences (Hodgins & Knee, 2002). Since such activity integrates into one's identity and is enjoyable, therefore, individuals find him/her enthusiastic to experiment with it and bring new ways of doing it. Harmonious passion positively affects employees' job satisfaction (Vallerand, 2003) generating a positive inner environment among them which in turn puts a positive effect on innovative work behaviour (Bysted, 2013). Over a decade, the researchers investigated and found that harmonious passion induces deliberate practice and leads to subjective well being and performance attainment (Vallerand et al., 2007). When individuals find no contextual driving force for innovation, the personality characteristics such as need for cognition come into picture and provide a motivation for engaging in innovative activities (Wu, Parker & De Jong, 2014). Harmonious passion leads to such positive affective, cognitive, behavioural and relational outcomes (Stoeber et al., 2011). Accordingly, it is proposed that:

Proposition 2: The more the harmonious passion among employees, the more the individual innovative behaviour will be.

Perceived Autonomy Support

Innovative tasks require a great deal of effort and change in the organizational processes. Individuals may feel reluctant to get approval for innovative ideas that may require substantial change in the existing products, services or processes because of a risk of failure attached to it and resulting vituperation. In such situation work environment autonomy plays significant role in improving one's creativity (Amabile, 1996). Employee-supervisor relationship has been found very crucial in the studies of internalization of innovative activities (Zhao, Kessel, & Kratzer, 2014). Keeping with self identity and autonomy desire from self determination theory, when employees perceive that their supervisor acknowledges their perspectives, offers choice and encourages self-initiation (Deci, Connell & Ryan, 1989), they find themselves secure and engage in innovative behaviour. Perry-Smith and Mannucci (2015) proposed that constructive feedback for improving new idea that help the creator to grow and develop in the workplace is perceived as supportive and enhance the intrinsic motivation of employees to be creative, as contradictory to controlling feedback which greatly undermines the innovative abilities. Based on the above conceptualization it is proposed that:

Proposition 3: The more the employees perceive autonomy support for innovation in workplace, the more individual innovative behaviour will be.

Peers' Innovation Expectations

The social identity perspective of identity theory suggests that societal role sets up expectations as to what constitutes role-appropriate behaviour and resulting performance of such behaviour then serves to authenticate a person's self-concept (Callero, 1985). Earlier studies have shown that creativity expectations of others are relevant for employees' creative performance (Shalley, 2008).

Consistent with social identity and relatedness perspective of self determination theory, when employees perceive that others in the organization expect innovative ideas from them, they logically think that they must be good at innovative tasks, and by the time, the employees would engage more in innovative behaviour. Drawing from impression management literature, individuals tend to be consistent with the expectations of various actors in the organization to avoid any conflicts with coworkers (Janssen, Vliert, & West, 2004) and to develop a positive image among them. Individuals are more likely to invest their time and energy in innovative behaviour when they believe that they are expected to engage in such behaviour (Hammond et al., 2011) therefore peers' innovation expectations are an important predictor of individual innovative behaviour. Ma Prieto and Pilar Perez-Santana (2014) studied the role of high-involvement human resource practices in the innovative work behaviour of employees and found significant mediating effect of co-workers' expectation. Built on the above evidences it is proposed that:

Proposition 4: The more the employees perceive that their coworkers expect them to bring and implement new ideas, the more the individual innovative behaviour will be.

Psychological Contract Fulfillment

Psychological contract is the employee's perception of beliefs about reciprocal obligations between employees and management (Rousseau, 1989). These perceptions, accurate or not, have been proved influential for employees' job satisfaction, trust, loyalty, sense of obligation, and performance (Robinson, 1996). Psychological contracts reduce individual uncertainty and increase job security by establishing agree upon employment conditions (Shore & Tetrick, 1994) thus encouraging employees to test their abilities and enhance their self-identity in the organization by practicing innovative activities. Agarwal (2014) found that psychological contract fulfilment increases trust and work engagement among employees which in turn significantly influence individual innovative behaviour in the positive direction. Drawing from social exchange theory, employees may reciprocate negative treatment from the management in the form of reduced innovative behaviour (Ng, Feldman & Lam, 2010). These negative treatments may be in response to economic downturns or industry competition (Arshad & Sparrow, 2010). On the contrary the employees who experience high levels of instrumental resources, such as links with significant others in the organization and increased organizational value, are more likely to engage in their work for acquiring more resources by innovating in their work roles (Kiazad, Seibert, & Kraimer, 2014). The above evidences indicate that psychological contract fulfilment significantly effects individual innovative behaviour:

Proposition 5: The more the employees perceive that their management is fulfilling the psychological contract, the more the individual innovative behaviour will be.

Based on the above conceptualization, a holistic framework for individual innovative behaviour is given in figure 1.

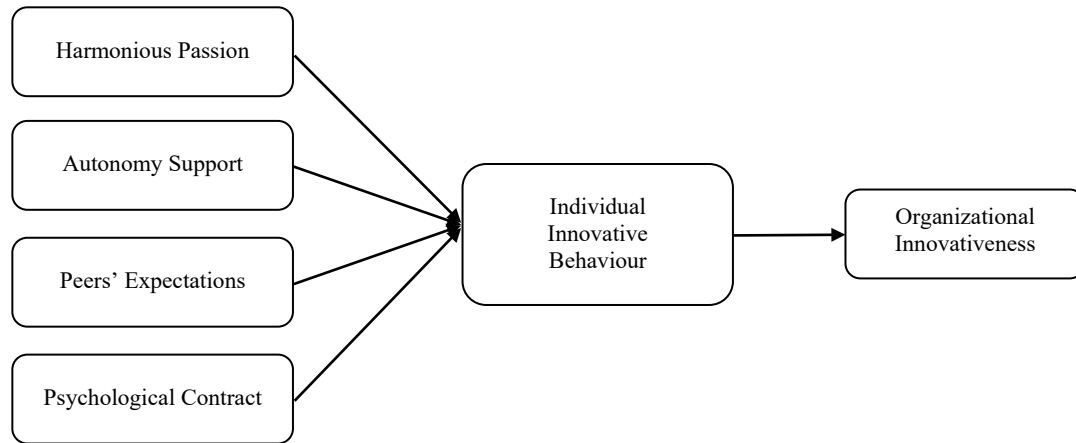


Figure 1: Holistic Framework for Individual Innovative Behaviour

Effect of Management Strategic Orientation on Innovations

The manner, in which a firm is organized, may significantly affect its innovation performance (Damanpour, 1991). Previous studies in strategic management literature, have conceptualized numerous types of strategic orientations at the disposal of a firm that may influence firms' innovations. For example, Zhou et al. (2005) found firms' market orientation favoring the technology-based innovations and adversary to the market-based innovations. Tajeddini (2010) conducted a study in hotel industry and found significant positive relationship between entrepreneurial orientation and innovativeness. Lewrick, Omar and Williams (2011) found competitor orientation, as a component of market orientation, counter-productive for radical innovations. However, despite the numerous advances in literature documenting the types of firms' strategic orientations and the resulting effects on firms' innovations, the moderating effect of management's imitation orientation and risk averse orientation on the relationship between individual innovative behaviour and organizational innovativeness appears to have been overlooked. Mainemelis (2010) proposed that management stops employees from working on new ideas they have generated but did not investigate the possible factors that may cause such behaviour of management.

Management Imitation Orientation

Firms can endure their market position through a cascade of innovations (Rubera & Kirca, 2012). But the development of innovative products represents significantly greater risk and uncertainty because of substantial investments in new technologies or markets (Alexander & Knippenberg,

2014). Companies often attempt to overcome these costs and prefer to follow competitors' ideas and technological practices (Naranjo-Valencia, Jiménez-Jiménez & Sanz-Valle, 2011). The extant literature has shown a remarkable shift in the views regarding organizational imitation orientation. The emerging literature suggests strategic integration of innovative and imitative practices in order to achieve above average profits and therefore imitation is increasingly considered on par with innovation as an alternative strategic option for successful business performance (Najda-Janoszka, 2014). This advancement is a true reflection of the notion asserted by Amabile in 1998, saying, "creativity is undermined unintentionally every day in work environments that were established- for entirely good reasons- to maximize business imperatives such as coordination, productivity and control." This study proposes that excessive imitation orientation subjugates the employees' ability to introduce and implement innovations in processes, products and services and ultimately adversely affects organizational innovativeness:

Proposition 6: Management imitation orientation moderates the relationship between individual innovative behaviour and organizational innovativeness so that for any given degree of individual innovative behaviour the management imitation orientation will regulate the rate of organizational innovativeness.

Management Risk Aversive Orientation

Novelty is the core characteristic of innovations and implies significantly greater risk as compared to routine performance or mere adoptions. Statistics show that 40% of the innovative products fail (Castellion & Markham, 2013) whereas the success rate in developing countries is only 2% (Ozer, 2006). In such situations risk taking by implementing new ideas seems tough decision, whereas excessive risk management can badly discourage radical ideas (Bowers & Khorakian, 2014). The impact of risk aversion on adoption decisions is well documented (Wossen, Berger, & Di Falco, 2015). The link between managerial support and creativity has been well established in the previous studies (Shalley & Gilson, 2004). Resistance to innovation by managers is a critical barrier that obstructs the positive actions of creative members of the organization (Fischer & Rohde, 2013). Research have shown that risk averse decision makers choose the certain or low risk alternative whereas risk seeking decision makers go for the high risk alternative (Wullenweber, 2007). As a result they sacrifice some of the expected returns that could have been attained through innovation (March & Shapira, 1987). Depending on the context, there are equal probabilities of success and failure in going first (Suarez & Lanzolla, 2007). So, first mover advantage not necessarily turns to competitive advantage (Boulding & Christen, 2008) therefore, risk averse managers often resist taking the chance of failure. Fischer and Rohde (2013) examined that management may resist innovation at two levels, the resistance to idea and its approval or the resistance to the implementation of approved idea. Therefore, it is proposed that:

Proposition 7: Management risk aversive orientation moderates the relationship between individual innovative behaviour and organizational innovativeness so that for any given degree of individual innovative behaviour the management risk aversive orientation will regulate the rate of organizational innovativeness.

Based on the above conceptualization, the integrated framework of the proposed study is given in figure 2.

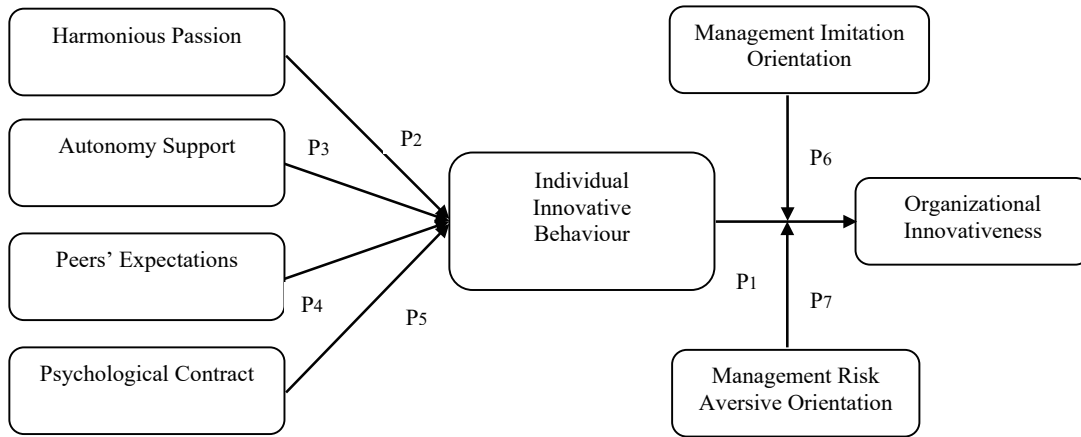


Figure 2: Integrated Theoretical Framework

Methodology

The purpose of the study was to identify the critical factors that may affect individual innovative behavior and the possible management strategic orientations that may adversely affect organizational innovativeness by hindering individual innovative behavior. The propositions were developed from the literature and then validated through semi-structured interviews conducted from professionals in service sector through audio recording method. The sample included 6 managers 2 from each of the telecommunication, banking and travelling industry.

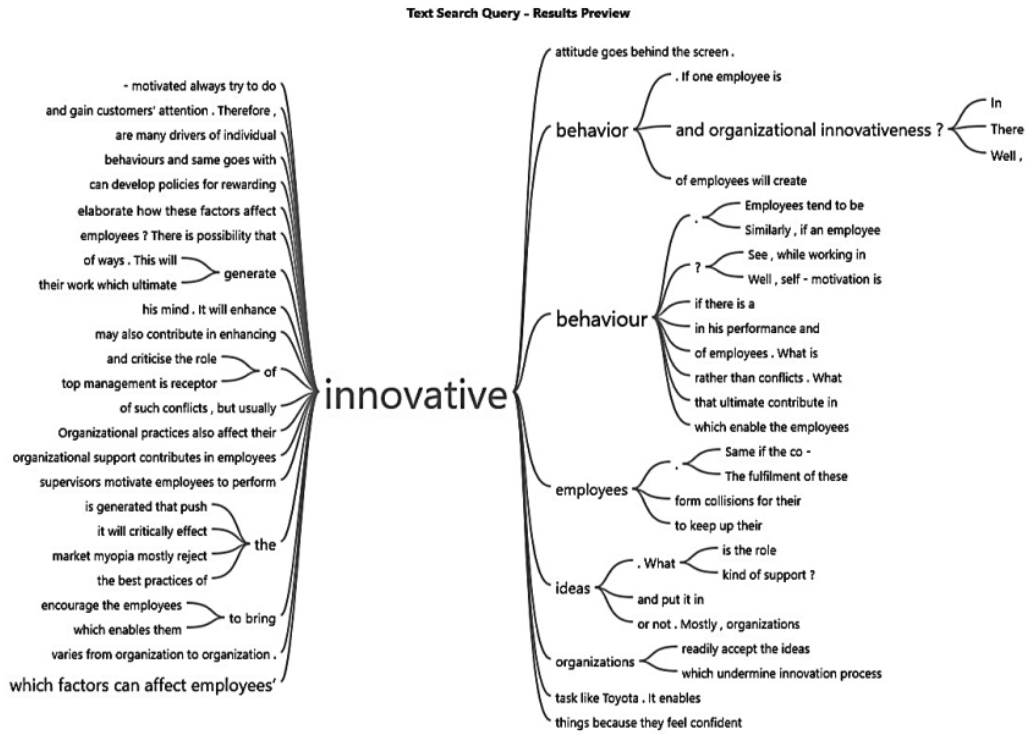
Data Analysis

The interviews were transcribed into text form then imported into NVIVO 11 for further analysis. Different qualitative data analysis techniques were used including thematic analysis, coding of data and hierarchy chart. Figure-3 shows the Word Tag Cloud which shows different themes of the conversation according to the repetition and frequency of the words used. It is used as thematic analysis technique for identifying the theme of the study.



Figure 3: Word Tag Cloud

Word Tree Map is given in Figure 4 which represents the link of word “innovative” with different themes used in the conversation. This Map helps in exploring the linkage of new themes with other themes.



Results

Critical Factors Measuring Organizational Innovativeness- Hierarchy Chart

Figure 5 provides the Hierarchy Chart which represents the most critical factors measuring organizational innovativeness. The figure shows that there are 3 major factors affecting organizational innovativeness which are individual innovative behavior, management risk aversive orientation and management imitation orientation whereas creativity avoidance and resource constraints are of lesser importance. It can also be seen that Autonomy support, harmonious passion, peers' expectations and psychological contract are the most critical factors that may affect individual innovative behaviour whereas organizational culture, extrinsic interest and employees' attributes are less important. The less important factors were eliminated from the model.

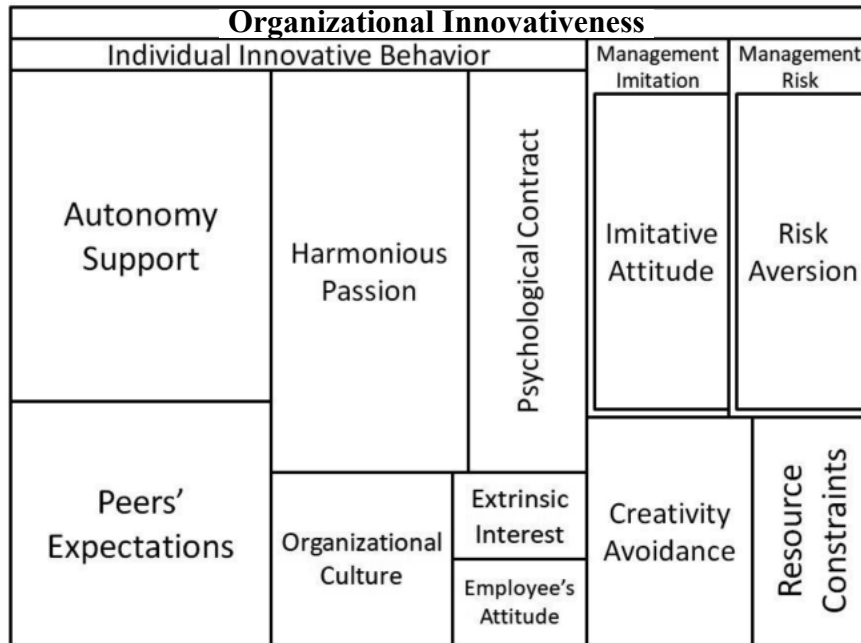


Figure 5: Hierarchy Chart

Conclusion

The importance of innovation for businesses is widely recognized and accepted. By pioneering an idea in the market, the firms will be able to develop a strong base for building competitive advantage (Jenkins, 2014). This study identifies the psychological processes that may enhance individual innovative behaviour. It also explores the management strategic orientations that can adversely affect organizational innovativeness by effecting individual innovative behaviour. It guides management to take the right decision on preferred type of risk attitude for competing in the market and effectively translating employees innovative behaviour into innovation. The idea that looks weird, sometimes become a discovery, therefore, it is suggested that overcoming these negative orientations towards innovation, organizations should adopt such strategies that may create their own markets.

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THE IMPACT OF HR PRACTICES ON PERCEIVED EMPLOYEE PERFORMANCE: MEDIATING ROLE OF HRM OUTCOMES IN EDUCATIONAL INSTITUTES OF PAKISTAN

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Abstract

The current research aims to investigate the impact of HR practices on perceived employee performance with mediating role of HRM outcomes in public versus private education sector of Pakistan. For this purpose, data was collected from 392 public and 397 private school teachers through a questionnaire. The results of correlation illustrate that HR practices have an effect on HRM outcomes and perceived employee performance. Hierarchical regression was run to analyze the mediating role of HRM outcomes on the relationship between HR practices and perceived employee performance. Results demonstrate that HRM outcomes partially mediate the relationship between HR practices and perceived employee performance. This paper adds to the existing knowledge by providing empirical insights into the relationship between HR practices and perceived employee performance in Pakistan's educational context. This research has important theoretical and practical implications for Pakistan's education sector in the area of HRM-performance relationship.

Keywords: HR Practices, HRM Outcomes, Perceived Employee Performance, Pakistan's Education Sector.

JEL Classification: M590

Introduction

“Education is the most powerful weapon which you can use to change the world” Nelson Mandela. Education is the part of fundamental needs of our society. A teacher is responsible to build up a nation and plays a very complex role. It is expected from a teacher to help students and to provide

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quality education to them. For this reason, it is vital to analyze the factors that influence teachers' effectiveness (Arands, 2001). In Pakistan, education is getting importance as the specialists suggested to invest more in education sector to bring success and prosperity in the country (Sial, Jilani, Imran, & Zaheer, 2011). The report published by the team of World Bank on higher education has pin point that Pakistan's education sector is suffering from many problems with the highest priority to the excellence of faculty members (Shahzad, Rehman, & Abbas, 2010). Over the last few years, Higher Education Commission has initiated various schemes and revised training programs, compensation packages, improved facilities, native and foreign scholarships to improve faculty qualification (Rasheed, Aslam, Yousaf, & Noor, 2011).

All the organizations either it is public, private or non-profit must need human resources to operate different functions. Organization's major focus is on enhancing employee performance (Tessemaa & Soeters, 2006). In Pakistan's context, previous researchers examined the impact of HR practices on perceived employee performance (PEP) however; mediating effect of HRM outcomes like competence, role clarity and motivation was not examined. This provides the rationale to conduct this study.

The current research poses the following research questions:

RQ1: When, how and to what level HR practices influence perceived employees' performance?

RQ2: Do HRM outcomes mediate the relationship between HR practices and perceived employee performance?

Literature Review

Effective HRM has gained attention and is considered vital in the development processes of developing countries (Bennell, 1994; Grindle & Hilderbrand, 1995; Prah, 2004). It is human resource through which organizations achieve their short term as well as long term goals (Ali et al., 2014). The organizations whose center of attention is the better administration of their human resource are successful in achieving the competitive advantage as compared to the organizations which do not focus on the management of their human resource (Wright, Gardner, & Moynihan, 2003).

Though previous researchers analyzed how HR practices affect organizational performance, however, there is scarcity of studies on HR practices and employee performance relationship (Tessemaa & Soeters, 2006). Tessemaa and Soeters (2006) examined the relationship between human resource practices and employee performance with mediating role of human resource outcomes. Eight HR practices were focused including recruitment and selection practices, placement practices, training practices, compensation management practices, employee performance evaluation practices, promotion practices, grievance procedure, pension plan and social security. Various researchers argued that only three HR practices including compensation management practices, performance evaluation

practices and promotion practices significantly influence PEP (Ahmed & Shahzad, 2011; Riaz, Ayaz, Wain & Sajid, 2012; Shahzad, Bashir & Ramay, 2008; Ali, Rehman & Shah, 2014; Bowra, Sharif, Saeed & Niazi, 2012). Moreover, the researchers argue that in developing countries like Pakistan, people have low per capita income and the above mentioned practices of human resource have direct impact on their social and economic status (Riaz, Ayaz, Wain, & Sajid, 2012). Being in agreement with the previous researchers, the current research, therefore, focus on three HR practices namely compensation management practices, performance evaluation practices and promotion practices to investigate its influence on employees' performance.

Compensation Practices and Perceived Employee Performance

Like other concepts of HRM, compensation has different meanings. Compensation is an adequate and equitable remuneration paid to employees for their contribution in achieving organizational goals. Stajkovic and Luthans (2006) found that social recognition increased task performance by 17%, monetary incentives increased task performance by 23% and feedback increased task performance by 10%. It was further established that compensation increased employee performance by 45%. Shakir and Zamir (2014) analyzed the impact of rewards on teachers' performance at secondary level. The results showed correlation between extrinsic rewards and performance whereas no correlation between intrinsic rewards and performance. Oshagbemi (2000) studied the impact of compensation on teachers' performance and found a positive relation between compensation and teachers' performance. Employee productivity can be enhanced by many practices out of which one important factor is performance related pay which can derive higher employee performance (Sarwar, Aftab, Arif, & Naeem, 2014). This leads to propose the following hypothesis:

H1: Compensation practices have significant and positive impact on perceived employee performance.

Performance Evaluation Practices and Perceived Employee Performance

Performance appraisal is defined as the process of evaluating the performance on the basis of judgments and views of peers, supervisors, subordinates, other managers and even workers themselves (Jackson, E, & Schuler, 2003). As it is used to monitor the workers, it leads towards improvement in productivity (Storey, Sisson, & Keith, 1993). Effective performance management systems play an important role in measuring and improving productivity (Mani, 2002). According to Ali, Rehman and Shah (2014) performance evaluation practices do influence PEP in pharmaceutical companies. Based on the aforementioned discussion, we therefore propose:

H2: Performance evaluation practices are significantly and positively related with perceived employees' performance.

Promotion practices and Perceived Employee Performance

Promotion is the progression of an employee from one job position to another with higher salary package and higher level of work responsibilities (Wambugu, 2013). Employees feel motivated when they are provided with the means to achieve their targets (Armstrong & Murlis, 2004). According to Tessemaa and Soeters (2006) promotion practices influence PEP. We therefore argue that organizations must offer promotional opportunities to their employees if they want to enhance organizational performance (Park, Mitsuhashi, Fey & Björkman, 2003). Bowra, Sharif, Saeed and Niazi (2012) concluded that promotion practices have moderate impact on perceived employee performance. Ali, Rehman and Shah (2014) found positive and significant relationship of promotion practices with perceived employee performance. Riaz, Ayaz, Wain and Sajid (2012) argued that promotion practices positively influence the perceived employee performance. This directs us to propose the following hypothesis:

H3: Promotion practices have significant and positive impact on perceived employee performance.

HRM outcomes as a mediator

HR practices guide towards HRM outcomes which further impacts employees and organizational performance. Various researches suggest that human resource outcomes mediate the relationship between the human resource practices and employee performance (Fey, Bjorkman & Pavlovskaya, 2000; Paauwe, 1998; Guest, 1997). There are theoretical arguments like resource based theory, expectancy theory and human capital theory that provides some insight about how HR practices impact employee performance. Expectancy theory believes that an employee needs to be competent, motivated and clear about his role if he wants to be productive (Macduffie, 1995). If the organizations need to produce high quality services they need to retain their highly skilled, capable and talented employees (Tessemaa & Soeters, 2006). We, therefore, contend that HRM outcomes i.e. employee competence, role clarity and motivation mediate the relationship between HR practices and PEP.

H4: HRM outcomes mediate the relationship of HR practices and perceived employee performance.

As discussed above, Fig 1 shows the proposed conceptual model which demonstrates that HR practices are related to perceived employee performance via HRM outcomes.

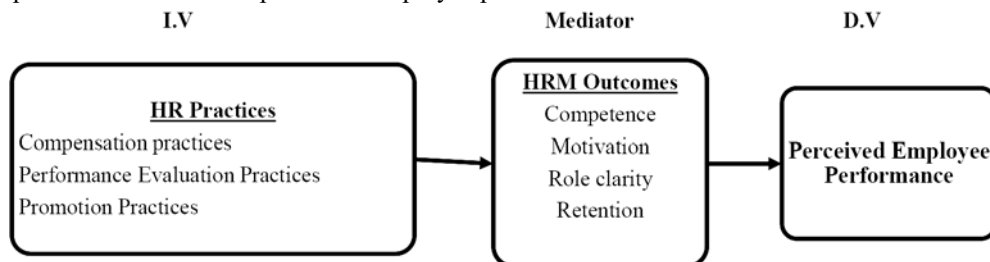


Figure 1: Proposed Model

Methodology

Participants and Procedures

The current research is quantitative in nature and used survey technique for data collection. The purpose of the study was hypotheses testing. Population of the study was comprised of 15,710 teachers from all the public schools and 45,063 teachers from all the private schools of Lahore, Pakistan. The data regarding population of schools in Lahore was collected from District Education Office, Lahore. Employees were chosen based on non-probability convenience sampling technique. Data was collected from 392 Govt. school teachers and 397 private school teachers of district Lahore through questionnaire surveys. Sample was calculated by using published table which suggest selecting sample of 390 if the population is 15,000 and 397 if the population is 50,000 at 5% precision level (Israel, 1992). The unit of analysis was “Employees” and the time dimension was cross sectional in nature as data was collected at one point in time.

Measurements

The measures were adopted from Tessema and Soeters (2006) which have already been used by prior researchers in education sector by Shahzad, Bashir and Ramay (2008). All the questions were rated on 5-point likert scale ranging from “1” (strongly disagree) to “5” (strongly agree).

HR Practices: HR practices were assessed by 15-items scale which consists of compensation practice comprising of 6-items scale, performance evaluation practice with 6-items scale, and promotion practices with 3-items scale.

HRM Outcomes: Mediator HRM outcomes was measured with a 3 items scale (Tessema & Soeters, 2006). HRM outcome scale comprised of 1 item of competence “I have got training that makes me more competent”, one item of motivation “I am satisfied with HR practices”, and one item of role clarity “I do not have role ambiguity and confusion”.

Perceived Employee Performance: 3 item scale of perceived employee performance was adopted from Tessema and Soeters (2006).

Data Analysis

To analyze the data, Cronbach alpha, descriptive statistics and Pearson correlation were run. Hierarchical regression was also run to determine the mediating effect of HRM outcomes. Cronbach alpha: The reliabilities of the measures are $\alpha=0.822$ for compensation practice, $\alpha=0.682$ for performance evaluation practice and $\alpha=0.661$ for promotion. HRM outcomes were estimated $\alpha=0.619$ while the reliability of PEP was estimated $\alpha=0.720$.

Results

Descriptive and Correlation Analysis

Table 1 shows the mean values ranging from 3.3 to 3.7 on a five point likert scale. The means as shown in table are fairly high.

Table 1

Correlation and Descriptive Analysis of HR Practices, HRM Outcomes and Perceived Employee Performance								
	Practices	1	2	3	4	5	Mean	SD
1	Compensation Practices	1					3.3885	0.89895
2	Performance Evaluation Practices	.556**	1				3.5068	0.68787
3	Promotion Practices	.336**	.312**	1			3.6257	1.08306
4	HRM outcomes	.131**	.183**	.270**	1		3.5694	0.60862
5	Perceived Employee Performance	.241**	.250**	.277**	.424**	1	3.7617	0.76835

Significance level is 0.01 (2-tailed)

Table 1 shows that HRM outcomes are positively and significantly correlated with perceived employee performance ($r = 0.424$, $p < 0.01$), compensation practices ($r = 0.131$, $p < 0.01$), performance evaluation practices ($r = 0.183$, $p < 0.01$) and promotion practices ($r = 0.270$, $p < 0.01$). Perceived employee performance is also positively and significantly correlated with compensation practices ($r = 0.241$, $p < 0.01$), performance evaluation practices ($r = 0.250$, $p < 0.01$) and promotion practices ($r = 0.277$, $p < 0.01$).

Multiple Regression Analysis

Multiple regression analysis was run to examine how well the three HR practices anticipate the PEP.

Table 2

Multiple Regression Summary						
			β	t- value	sig.	adj. R ²
1	Compensation Practices		0.206	6.971	0.00	0.057
2	Performance Evaluation Practices		0.279	0.039	0.00	0.061
3	Promotion Practices		0.196	8.081	0.00	0.079

As shown in above table, regression coefficient (β) of Compensation Practices is 0.206 and its significant value is 0.00 which shows that compensation practices have positive and significant impact on employee performance. H1 is, therefore, supported. Regression coefficient (β) of performance evaluation practices is 0.279 and its significant value is 0.00 which shows that performance evaluation practices have positive and significant impact on employee performance. H2 is supported. Regression coefficient (β) of promotion practices are 0.196 respectively and its significant value is 0.00 which shows that promotion practices have positive and significant impact on employee performance. H3 is thus supported.

HRM outcomes as a Mediator

Hierarchical regression was run to examine the impact of HR practices on PEP in the presence of mediating variable HRM outcomes. Four steps are followed in this method.

Table 3

Hierarchical Regression Summary						
		B	t- value	sig.	R square	adj. R ²
Step 1. Perceived Employee Performance						
	HR practices	0.372	9.921	0.00	.111	.110
Step 2. HRM Outcomes						
	HR practices	0.230	7.543	0.00	0.067	0.066
Step 3. Perceived Employee Performance						
	HRM Outcomes	0.535	13.139	0.00	0.180	.179
Step 4. Perceived Employee Performance						
	HR practices	0.267	7.403	0.00	0.233	0.231
	HRM Outcomes	0.457	11.193	0.000		

As shown in the table 3, results of mediation analysis exhibited that independent variables are positively associated with perceived employee performance in first step ($R^2=0.111$; $F=98.434$; $P<0.01$) which shows that HR practices have 11.1% impact on perceived employee performance. In second step, as shown in table 3, HR practices are positively related to HRM outcomes ($R^2=0.067$; $F=56.901$; $P<0.01$) and the value of β -coefficient (HR prac. = 0.230) and t- value (HR prac. = 7.543). In third step, as shown in table 3, HRM outcomes have positive and significant impact on perceived employee performance ($R^2=0.180$; $F=172.640$; $P<0.01$). More specifically, the β coefficient of HRM outcomes is 0.535 which is significant. Lastly, as shown in the fourth step, in the presence of HRM outcomes, HR practices still have positive and significant influence on perceived employee performance ($R^2=0.233$; $F=119.628$; $P<0.01$). However, the value of β -coefficient (HR Prac. = 0.267) and t- value (HR Prac. = 7.403) has decreased in the presence of HRM outcomes. Therefore, HRM outcomes partially mediate the relationship between HR practices and PEP. H4 is thus supported.

Discussion

All the results fulfill researcher's expectations based on theoretical insight. This research found positive and significant effect of compensation practices on perceived employee performance which is in line with the findings of previous researchers (Ahmed & Shahzad, 2011; Riaz, Ayaz, Wain & Sajid, 2012; Shahzad, Bashir & Ramay, 2008). However, this finding is not supported by other researchers (Tessema & Soeters, 2006; Ali, Rehman & Shah, 2014; Bowra, Sharif, Saeed & Niazi 2012). The findings suggest that performance of teachers in the schools of Pakistan is affected by compensation practices whereas in other contexts and cultures it might be possible that compensation is not a contributing factor in employees' enhanced performance.

In the present study, results illustrate that performance evaluation practices do impact PEP. This finding is supported by previous researchers as well (Tessema & Soeters, 2006; Ali, Rehman & Shah, 2014; Shahzad, Bashir & Ramay, 2008). This finding, however, is not supported by some other researchers (Ahmed & Shahzad, 2011; Riaz, Ayaz, Wain & Sajid, 2012). The possible reason for the difference in results may be that in Pakistan teacher's performance might be enhanced through performance evaluation practices while in other sectors may be the performance is not affected by performance evaluation practices.

Current study shows that promotion practices do influence perceived employee performance and this is supported by previous researchers (Ali, Rehman & Shah, 2014; Riaz, Ayaz, Wain & Sajid, 2012). This finding is not supported by the studies conducted by Tessema and Soeters (2006), Ahmed and Shahzad (2011) and Shahzad, Bashir and Ramay (2008).

In the current study, it is analyzed that the HRM outcomes partially mediate the HR practices and perceived employee performance relationship between and this finding is not supported by Tessema and Soeters (2006). It can be argued that Pakistan education sector is different from Eritrean civil

services reason being different work environment and cultural differences. However, this needs to be further investigated by conducting future research in various cities of Pakistan.

Implications

This study has many implications for education sector in Pakistan. It highlights which HR practices are required to be emphasized by school administration to enhance teachers' performance, why the selection of knowledgeable performance evaluator is essential, why is it needed to provide feedback to the employees, why schools need to formulate written and operational policy for promotion, how priorities to seniority as well as merit in promotion decisions contribute towards employee performance, why existence of equitable internal and external salary is essential and how can the organizations increase their employees' satisfaction and motivation level.

Recommendations and Conclusion

The current study examined how HR practices affect perceived employee performance with mediating role of HRM outcomes in public versus private education sector of Pakistan.

Regression results depicts that HR practices have positive and significant impact on perceived employee performance. Thus schools administration need to adjust the salaries and financial incentives according to the inflation rate in Pakistan. They should offer equitable internal and external salary. If there is effective implementation of promotion practices in the schools of Pakistan then it will be easy to achieve desired output from the teachers. Schools in Pakistan need to formulate some effective career development programs for the teachers to enhance their performance. They should devise written and operational policy for and give priority to seniority as well as merit in promotion decisions. The management of schools should pay special attention to evaluate the performance of their teachers and to provide them feedback if they want to enhance their performance. The management should consider performance evaluation as an important task and performance evaluators should be knowledgeable

Results of hierarchical regression show that HRM outcomes partially mediate the relationship between HR practices and PEP. Since the motivated teachers are more productive as compared to unconcerned teachers and more competent teachers with role clarity are more productive in comparison of incompetent teachers. It is therefore suggested that schools need to focus on the motivation, competency and role clarity of their teachers as well as the HR practices to enhance teacher's performance.

One of the research questions of this study is to investigate when, how and to what extent HR practices influence employee performance. Results illustrate that HR practices have 11.1% impact on PEP. Regarding promotion practices, presence of written and operational policy and priority to senior-

ity as well as merit in promotion decisions contribute towards employee performance. Taking into consideration the performance evaluation practices, presence of written and operational performance evaluation, provision of feedback, importance of evaluation recognized by management and knowledgeable performance evaluators play a vital role in enhancing employees' performance. Furthermore, in compensation management, existence of equitable internal and external salary enhances employee performance contribute to employee performance. Taking into account HRM outcomes competence, motivation and role clarity play an important role in enhancing employee performance.

Limitations and Future Research

The current research has few limitations. First the sample size was not large enough to generalize the results. Second, this study was conducted in only education sector of Lahore and future research may be conducted in any other sectors of Pakistan. Third, current research has been conducted at primary and secondary level whereas the future research may be carried out at higher education level.

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FUNDS INDUCTION, FLOWS AND FAMILY GROWTH: THE DYNAMICS OF ASSET MANAGEMENT COMPANIES

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Abstract

Assets Management Companies (AMCs) strive to channel and pool savings and invest these in well diversified portfolios in an optimal way. The size of these portfolios is closely related to their Assets under Management (AUM). This study in particular examined the effects of fund sizes—mainly the induction of new funds and the increase in existing funds, managed by AMCs on their AUM for the mutual fund industry of Pakistan. Furthermore, we assessed that whether Fund Family growth has any effect on individual fund. We examined a total of 180 open ended Mutual funds, managed by 18 AMCs over the period of July-2009 to most recent July-2016. The main findings suggests that both existing and new fund size are having positive and significant impact on AUM and also the growth of fund is strongly associated with Family growth. It was further observed that those AMCs who introduced new funds during this period, were managing relatively large assets as compared to those who introduced small amount of new funds or did not inducted any new fund at all during the period under consideration.

Keywords: Mutual Funds, Assets Under Management, Fund Sizes, Funds Induction, Fund Family Growth.

JEL Classification: G200

Introduction

Around \$26.8 trillion assets are under the management of mutual fund industry in various financial markets which is one of the basic investment vehicle for households and retired people in many countries across the world (Brown, & Wu, 2016). Assets Management Companies (AMCs) are pivotal to mobilize, channel and optimally allocate the savings of both individuals and institutional investors by investing in a variety of financial instruments of capital markets and money markets like stocks and bonds and other combinations (Nazir & Nawaz, 2010; Lai, 2016).

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Primarily AMC's play the role of pooling savings and investing in well-diversified portfolios and secondarily AMC's help the investors in terms when investors are relatively less informed, have very little knowledge of investment climate and has very little tolerance or appetite for risk. Afza and Rauf (2009), characterizes this second function of AMC's that is to provide an indirect mode of low risk investment to be essentially the most important—particularly for a country like Pakistan.

In Pakistan, National Investment (Unit) Trust (NIT) was the first open-ended mutual fund which was introduced in 1962. Later on, Investment Corporation of Pakistan (ICP) was established in 1966, which launched a series of closed-end funds and as a result, by 1990s there were twenty six closed-end funds operating in the country. Initially both public and private sectors were participating in managing these funds, however after nationalization, in 1970s, the government performed more dominantly and allowed private sector to introduce private mutual funds products as well (Shah & Hijazi, 2005). In Pakistan, this multi billion rupees industry of mutual funds is managed under the trade body of 'Mutual Funds Association of Pakistan' (MUFAP) with lots of investment options for managing and rolling the money such as government securities, stocks, money market instruments, bonds and bank deposits. The association of MUFAP was established in 1996 and incorporated formally in 2001, limited by guarantee without share capital as a public company, licensed by Ministry of Commerce. The responsibilities of MUFAP include; ensuring optimal industry growth, high ethical conducts and transparency. However another body of 'Corporate Law Authority' was also monitoring the industry under securities wing which was gradually transformed to become the Securities and Exchange Commission of Pakistan as an independent organization based on the decision of Asian development bank as part of the Capital Market Development Program.

The establishment of MUFAP allowed private and foreign companies to offer general public a variety of open-ended funds; as a result, stock market performed well on new heights and registered 15 times growth in terms of net assets during the period of 2000-2008. The annual compounded growth rate grew at 14.45% from 2004 to 2013 in terms of mutual funds and the net assets grew from Rs. 93.82bn in 2004 to Rs. 335.23bn in 2008. However, in 2008, when financial industry collapsed worldwide, this industry also faced huge losses nearly by half of its net assets i.e. Rs. 182.36bn till 2009. However the industry picked up growth once again in the year 2010 and reached to the level of Rs. 361.67 bn till June 2013⁴.

To boost the size of Assets under Management (AUM), AMC's occasionally launch new funds by injecting large amount of funds by introducing new and attractive fund (s) packages to general public and corporate sector. However at the same time, AMC's also strive to increase the size of the total net assets under management in order to augment the existing base or the fund size. Furthermore, high costs and extensive time is required by the AMC's for introduction of new funds and to make them attractive and to correspond with regulatory bodies is a challenging task at hand. Hence this

⁴ The information is available on the official website of the MUFAP on <http://www.mufap.com.pk>.

study is an attempt to identify whether the induction of new funds is more attractive decision of AMC's for the purpose to increase the total net assets or to focus on to increase and broaden the existing funds size (s)? In addition, we also assessed the breadth effects of fund family growth on the growth on individual fund which is the main departure of this study and makes it unique. Moreover this study is a pioneering work in the case of Pakistan to the best of our knowledge and is significant in the sense that it will not only lead AMC's to make rational and prudent decisions about inducting new funds but will also provide insights to save time and resources if the result is not potentially advantageous and profitable. And thus this study will particularly answer the question that whether new funds induction contribute more to the growth of AMC's or increasing the size of existing funds contribute more to the same? Furthermore, we contribute to the existing literature of mutual fund family in Pakistan by adding new dynamics of family growth effects at family level and the relevance of breadth effects at individual levels of mutual funds.

The rest of this paper proceeds as follows; the next section provides a brief survey of contemporary literature, section 3 discusses the methodology whereas the results are presented in section 4 and finally section five concludes.

Literature Review

This section briefly focusses on contemporary literature on the funds sizes and AUM of AMC's whereby an extensive body of literature exists, however the most relevant and closest reference comes from that of Pollet and Wilson (2008) and Lai (2016) who suggested that typical fund behavior is slightly affected by assets growth. They concluded that small and large cap funds diversify their investment portfolios in response to growth where the higher the rate of diversification the better the performance would be. It has also been suggested that introducing new funds instead of expanding the size of existing fund has positive effect on the growth of mutual fund families.

Similarly, the size and induction of new funds are also important in the sense that when more funds are injected, it becomes relatively more attractive for investors (Lai, 2016; Bessler et al., 2016). However Beckers and Vaughan (2001) presented an alternative and rather contrasting outlook and examined to reflect some light on fund size as a potential investment performance detractor. They quantify the effects and significance of funds sizes on performance and identify that performance becomes a drag and self defeating by charging excessive monies to their customers. Hence on average mutual funds underperforms the market. They also argued that more aggressive strategy leads to dramatic impact due to the significant growth in AUM. However Beckers and Vughan also reported that there is no such thing as optimal fund size and that the potential to add value invariably drops as a fund grows, resulting in the loss in efficiency. The same idea has been echoed and recocheted by Gruber (1996) and Cvijanović et al. (2016), who also argued that mutual funds in many cases develop business relationships with blockholders in their portfolios and explored that whether business relations has any significance on the decision to include or exclude such firms in their portfolios.

Similarly, Zheng (1999) posed a serious question that despite inferior performance, mutual funds have grown so fast. However, they provided evidence that funds in which large amount is injected by investors subsequently perform better significantly than those funds which do not get focus of investors and lose money. However this effect is brief and is mostly but partially explained by winners betting strategy. They also concluded that there is as such insignificant evidence that funds which were found attractive to investors and receive investments, subsequently beat the market possibly by the use of small funds cash flows. On the other hand, (Elton et al., 2007; Christoffersen et al., 2014) echoed that investors should invest in different families rather at individual family irrespective of size due to similarity in managers' economic outlook. Similarly, (Khorana & Servaes, 1999; Lai, 2016) while studying the decision making process within family, found that families larger in size and those who introduced funds in larger numbers usually get more attention by offering new funds. However they didn't find any support that whether introducing new funds are due to poor performance of existing ones. However Brown and Wu (2016) found high correlation in same family fund irrespective of its size and pointed out towards the benefits of investing in low correlation diversified mutual fund families.

An interesting proposition by Gruber (1996) examined that in the United States mutual funds has shown outstanding growth and is rapidly growing as a financial intermediary. However the question is why? Despite the fact that when index funds have shown lower performance on average. However some possible reasons could be that funds are bought and sold at net asset value without further consideration regarding the management abilities which if not included in pricing-renders the performance unpredictable. Performance can be predictable only if the abilities of management are ignored. To this, Christoffersen et al. (2014), Choi et al. (2016) observed that intuitively investors relate future performance with past performance trend. Similarly, on a very unorthodox note and utilizing a novel approach, Cooper et al. (2005) examined the effects of name changing by mutual funds to take advantage of current investment styles. The study further analyzed that whether a mere name change commensurate with current investment styles lead to any effects in inflows to the fund and resultantly in fund's returns. Utilizing Fama-French three -factor alpha, interestingly they found that on average funds experienced 28% cumulative abnormal flows in the year after changing the name of funds for the purpose to get the reflection of hot styles prevailing in the current business atmosphere. However no evidence of improvement in the performance was ascertained. This irrational influence on investors is on the basis of cosmetic effects, as the inflow status is similar in the same pattern style, but not in those funds which are different than the current hot styles. As a corollary, Lai (2016) argued that mutual funds are usually amassed by their investment aims or the 'style' of their managers. A new simple, though, non-linear empirical approach is proposed to determine the manager 'style', which is found to be superior to common industry classification. On a similar theme, Barberis and Shleifer (2003) examined the categorization of risky assets into different styles by some investors and based on relative performance moves in these styles. When these movements are too much, the correlation increases with style when assets are reclassified. It is also pointed that returns of these styles show relatively large of own- and cross-autocorrelations and that profitability is there

with value strategies and asset-level momentum. Chan et al. (2016) showed significant negative relation between performance-adjusted net flow growth and risk taking tendency.

Likewise several others have tried to develop various empirical models like Choi et al. (2016), Bessler et al. (2016). However to conserve space, we hereby take only a couple of examples, for instance, Obstfeld (1994) developed a continuous-time stochastic model in which international risk-sharing can yield extensive beneficial advantages. Hugonnier and Kaniel (2010) analyzed the effects of forceful ins and outs on the decisions of mutual funds portfolios. In their model, narrow-minded investors enthusiastically assign investment combining a less risky asset and an actively managed fund which charges fund fees in fractions. The model resulted in positive association between a fund's comparative fee rate and its instability. This is usually a concern of higher-fee funds allocating more risky equity positions. Whereas both the fund portfolio and investors' exchange strategies depend on the comparative fee rate, the stability value functions do not. Remolona et al. (1997) studied relationship of market returns and funds flows using current historical evidence and proves that market short term returns affect fund flows. An assumed process, though, requires not just correlation but two-way connection between flows and returns in which fund financiers respond to market activities while the market itself retorts in response to the financiers' behavior. In addition, the paper inspected the data on cumulative mutual fund movements by distributing them into expected and unexpected modules and examining their relationships with market yields. Finally, the paper concluded that on usual, the impacts of short-term earnings on mutual fund flows have been relatively weak however were found to be strong in definite periods of major market failures, though still not robust enough to tolerate a dipping curve in asset prices.

Highlighting the significance of the industry in the case of Pakistan and highlighting the need for further progress, Shah and Hijazi (2005) stated that mutual funds are vital financial development and has showed remarkable growth specifically to mobilize savings but still substantial progress is required in comparison to developed countries. Capital markets in developed economies are contributing to overall progress and economic expansion. Similarly Afza and Rauf (2009) argued that the emergence of mutual funds industry in Pakistan is a wonderful development. However much has been done and healthy progress can be witnessed, still a lot is necessary and crucial for the growth of this industry in the case of Pakistan both in closed and open ended funds. Another contribution in the case of Pakistan comes from that of Nazir and Nawaz (2010) who examined the determinants of mutual funds growth in Pakistan. Utilizing panel regression estimation along with fixed and random specifications, it was found that funds returns, family proportion and ratio of expense are positively linked with growth of mutual funds while management fee and risk adjusted returns are negatively associated with mutual funds growth in the case of Pakistan.

Given that overwhelming amount of literature is available and numerous models and methodologies are being used to investigate various dimensions of funds performance, growth and sizes. However the literature concerning Pakistan is narrow and scarce. Few studies have been done

and to the best of our knowledge none has assessed the effects of fund sizes mainly the induction of new funds or increasing the size of existing fund on the AUM and the effects of family growth on the growth of individual funds managed by AMCs particularly in the case of Pakistan. Hence this study is designed to traverse this gape and is the first of its kind effort.

Research Hypotheses

- H1:* New Funds induction significantly affects Net Assets of AMCs.
H2: Increase in existing Fund Size significantly affects Net Assets of AMCs.
H3: Fund Growth Performance depends on its Family Growth Performance.

Tools and Methods

We selected a total of 180 open ended Mutual funds, managed by 18⁵ AMCs over the period of July-2009 to most recent July-2016. Utilizing quarterly data with a total of 3,808 observations are included in the initial sample which forms quite a reasonable sample. All the data is extracted from the website of MUFAP and the financial managers' reports of the AMCs. Primarily, the data has been prepared in three phases; initially the data has been collected for the selected variables of AUM, New Fund Sizes (NFS) and Existing Fund Sizes (EFS). In the second phase, increase and decrease of fund sizes and AUMs are calculated in percentage terms. And finally the annual increase or decrease in fund sizes has been calculated in percentage terms, however newly inducted funds have been separated from the existing funds. In this way, funds merged and acquired before July-2009 are not considered. Similarly closed end funds during the mentioned period are excluded. Furthermore AMCs which did not launch new funds during the said period are also excluded from the sample. The final variables are then supplemented into the following model;

$$AUM_{it} = \alpha_i + \beta_1 EFS_{it} + \beta_2 NFS + \varepsilon_{it} \dots\dots\dots(1)$$

Where:

- AUM: Assets under Management of the AMCs
 EFS: Existing Fund Size of the AMCs
 NFS: New Fund Size of the AMCs
 ε_{it} : the stochastic disturbance or error term

Where the subscripts it represents the measure for AMC i at time t. The convention purpose is to let i denote the cross section effects and t for the time identifier. The above equation (1) is a panel regression approach and is estimated accordingly to obtain the common effects.

⁵Initially, we selected 20 AMCs, however later on, PICIC Asset Management has been acquired by HBL and KASB Securities was merged with Bank Islami.

However, considering a simple case of panel data with possibly a disregard for space and time dimensions, in such ways the resultant model will have constant coefficients both in terms of intercepts and slopes. In other words we are simply saying that there is neither significant space (firm) nor temporal (time) effects. In such case scenarios we can pool all the data and just estimate usual OLS regression to capture the common effects among the variables in the model. The resultant estimation is usually done with the whole sample that is (n x t) and coincides with the ordinary least square estimation (Gujarati, 2004).

However, a common risk associated with relying only on the OLS is that the coefficients might be correlated with the error term-there will be some form of endogeneity, thus making the estimated coefficients a bit unbiased and we might lose the potential opportunity to get rid of the unobserved fixed and random effects. Hence, in order to deal with panel and cross sectional specifications, these two issues of Heterogeneity bias and the endogeneity needs to be considered (Kumar et al., 2015). To care for the unmodeled heterogeneity and endogeneity within our parameters, the following Fixed Effect and Random Effect models have been expressed;

A simple Fixed Effect model can be represented as;

$$y_{it} = \alpha_i + X_{it}\beta + \varepsilon_{it} \dots\dots\dots(2)$$

Similarly a Random Effect relationship can be modeled as;

$$y_{it} = \mu + \alpha_i + X_{it}\beta + \varepsilon_{it} \dots\dots\dots(3)$$

The efficiency of the above models are tested under the Hausmann Test and the LM (Lagrange Multiplier) test as model selection tools to test the appropriateness of our models that whether FE or RE will yield efficient and robust estimators in our case.

Empirical Findings

In this study a total of 180 open ended mutual funds were selected which are under management of the 18 AMCs. Table 1 provides a description of the same with their net assets flows in percentage terms over the period 2009-2016. Some points to ponder from table I are that AUM size declined during FY 09-10 by 35% due to decline in AUM of 9 AMCs with 40.38%, 29.48%, 7.96%, 19.30%, 47.78%, 7.99%, 19.44%, and 28.45% of AKD Investment Management Ltd., Askari Investment Management Ltd., Habib Asset Management Ltd., HBL Asset Management Ltd., JS Investment Ltd., NBP Fullerton Asset Management Ltd., Pak Oman Asset Management Company Ltd. and UBL Fund Managers Ltd. respectively.

Although, the overall decline of 35% in FY 09-10 was the result of remarkable declining in

existing funds' sizes of 15 out of 18 AMCs with 939%, but the contribution of 8 new funds with 575% showed high impact during FY 09-10 and helped the industry to cover up the declining in AUM size. This declining behavior was the result of shaky investor confidence due to global financial crises and revoked in the mid-2009.

However, FY 10-11, gone well for the industry, where not only existing funds' sizes increased with 1441% as compared to FY 09-10 but also induction of new funds contributed well with 1500% , resulting in the overall growth of 582% in terms of AUM size. Considerable growth of 74%, 129% and 118% was observed by ABL, Askari and HBL respectively. This growth was the result of contribution in existing fund sizes of 9 AMCs with the contribution of almost 2000%, where 7 AMCs inducted new funds. This was supplemented by restored investor confidence globally. Similarly, FY-11-12 proved to be the most progressive year in terms of new funds with a staggering 4313% growth. However, FY-12-13 recorded a 3386% growth in existing funds followed by 3314% in the year 13-14 which is taken to be a good sign for the industry to consolidate. Again in FY-14-15, the highest growth in new funds is observed with remarkable 5120%, followed by 620% in the following year and 3869% in terms of existing funds—again consolidating.

Similarly, Table 2 provides a detailed description for the net assets under management of AMCs and provides a general portrait that those AMCs who introduced new funds during the time under consideration turn to end up with relatively higher total net assets under management. Similarly Table 3 shows that by June 2009, a total of 81 open-ended funds were being managed by AMCs, however, later on, 90 new funds were introduced by the industry.

Finally, to test our first two hypotheses, summary of our regression model(s) of common effects along with fixed and random effects are produced in table 4. The summary of results for our regression models as presented in Table 4, exhibits that the independent variables are able to determine the Assets Under Management (AUM) for the AMCs under consideration are more or less the same under the three models as 34.6% under common effects, 34.7% under the Random Effects and 33.9% under the Fixed Effects model as indicated by the adjusted R².

It was observed that all of the estimated coefficients are statistically different from zero with the expected signs in all of the three models implying that increase in existing fund size is significantly and positively contributing towards the AUM for about more or less 0.07% under all of the three estimated models. The positive sign implies that by a unit increase in the existing fund size, the firms will observe an increase of 0.07% on average. Similarly induction of new funds (NFS) turns out to be another major determinant of AUM as shown to significantly and positively affecting AUM for almost 0.08%.

Table 1

Panel-A (FY 09-10 to 12-13): Net assets flows in percentage of AMC's in the open-ended category of mutual fund industry.

S. No.	Asset Management Companies	FY 09-10			FY 10-11			FY 11-12			FY 12-13		
		AUM	EFS	NFS	AUM	EFS	NFS	AUM	EFS	NFS	AUM	EFS	NFS
1	ABL Asset Management Company Limited	-0.74%	-4.96%	0.00%	-29.29%	13.80%	331.62%	280.28%	37.09%	1718.47%	-46.67%	197.10%	0.00%
2	AKD Investment Management Limited	-40.38%	109.45%	0.00%	-4.16%	6.34%	0.00%	5.02%	-8.27%	-0.62%	67.32%	332.87%	0.00%
3	Al Meezan Investment Management Limited	9.98%	111.47%	81.06%	68.14%	1124.23%	0.00%	27.08%	35.03%	0.00%	17.07%	181.01%	207.65%
4	Alfalalah GHP Investment Management Limited	234.51%	8.18%	18.59%	13.69%	-59.65%	142.94%	24.46%	102.45%	0.00%	1.71%	157.94%	0.00%
5	Askari Investment Management Limited	-29.48%	109.88%	334.18%	129.63%	446.90%	0.00%	45.28%	79.50%	7.97%	-17.22%	164.85%	110.44%
6	Atlas Asset Management Limited	16.41%	-85.24%	31.95%	34.90%	93.85%	0.00%	28.09%	135.88%	0.00%	15.46%	205.11%	0.00%
7	BMA Asset Management Company Limited	17.60%	-88.10%	27.68%	-32.29%	-98.23%	0.00%	43.84%	203.59%	0.00%	-11.43%	-12.93%	0.00%
8	Faysal Asset Management Limited	6.57%	-24.84%	0.00%	-25.57%	-70.21%	81.35%	-25.65%	175.74%	0.00%	11.96%	8.43%	0.00%
9	Habib Asset Management Limited	-7.96%	-15.03%	-14.09%	8.39%	-30.73%	43.62%	61.02%	156.36%	0.00%	23.17%	93.37%	9.61%
10	HBL Asset Management Limited	-19.30%	-79.87%	0.00%	118.85%	27.61%	446.74%	51.07%	280.33%	3.44%	14.22%	266.22%	0.00%
11	JS Investments Limited	-47.78%	213.85%	0.00%	6.99%	-112.66%	2.87%	-1.65%	-17.36%	0.00%	18.95%	64.12%	0.00%
12	Lakson Investments Limited	68.25%	119.97%	0.00%	41.23%	150.46%	0.00%	64.56%	102.58%	11.87%	36.12%	108.64%	0.00%
13	MCB-Arif Habib Savings and Investments Limited	305.78%	48.45%	42.47%	7.66%	-91.04%	0.00%	44.67%	0.37%	288.42%	-16.35%	287.52%	0.00%
14	National Investment Trust Limited	12.02%	-7.57%	28.31%	24.45%	2.65%	0.00%	5.36%	40.90%	0.00%	17.67%	98.29%	0.00%
15	NBP Fullerton Asset Management Limited	86.87%	-93.90%	25.68%	25.05%	-72.36%	272.32%	124.91%	275.86%	1932.43%	-0.13%	527.40%	0.00%
16	Pak Oman Asset Management Company Limited	-19.44%	-66.03%	0.00%	57.43%	174.51%	0.00%	-0.21%	-92.31%	-28.12%	13.97%	82.99%	0.00%
17	Primus Investment Management Limited	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	111.11%	561.36%	0.00%
18	UBL Fund Managers Limited	-17.95%	-97.43%	0.00%	33.58%	-63.77%	179.02%	68.65%	251.89%	379.97%	-34.52%	61.97%	-24.77%
	Total	574.94%	708.09%	575.81%	478.69%	1441.69%	1500.49%	846.80%	1759.62%	4313.82%	222.43%	3386.27%	302.93%

Panel-B (FY 13-14 to 15-16): Net assets flows in percentage of AMC's in the open-ended category of mutual fund industry.

S. No.	Asset Management Companies	FY 13-14			FY 14-15			FY 15-16		
		AUM	EFS	NFS	AUM	EFS	NFS	AUM	EFS	NFS
1	ABL Asset Management Company Limited	47.35%	145.71%	125.60%	69.50%	254.66%	0.00%	39.74%	149.11%	143.65%
2	AKD Investment Management Limited	11.37%	54.62%	0.00%	7.85%	-11.33%	0.00%	35.49%	198.20%	0.00%
3	Al Meezan Investment Management Limited	21.49%	154.36%	100.87%	16.34%	249.52%	4356.58%	19.40%	158.31%	223.56%
4	Alfalalah GHP Investment Management Limited	16.73%	277.95%	0.00%	52.83%	440.39%	428.57%	18.62%	414.63%	76.69%
5	Askari Investment Management Limited	-5.13%	-104.15%	0.00%	-16.47%	79.38%	0.00%	13.54%	51.25%	0.00%
6	Atlas Asset Management Limited	44.60%	147.03%	-27.23%	20.87%	211.09%	229.76%	19.12%	135.16%	0.00%
7	BMA Asset Management Company Limited	-38.00%	-77.14%	0.00%	70.41%	291.44%	0.00%	-7.27%	-37.55%	0.00%
8	Faysal Asset Management Limited	51.07%	129.19%	-7.29%	-7.92%	255.33%	0.00%	14.03%	158.20%	12.68%
9	Habib Asset Management Limited	33.13%	9.86%	0.00%	-28.80%	7.19%	0.00%	-1.43%	33.50%	0.00%
10	HBL Asset Management Limited	25.52%	403.02%	0.00%	-16.43%	-103.84%	-6.99%	12.26%	76.54%	20.00%
11	JS Investments Limited	7.51%	229.18%	-45.73%	-42.71%	-136.78%	0.00%	-1.16%	64.28%	0.00%
12	Lakson Investments Limited	-18.99%	480.08%	0.00%	-0.05%	54.82%	0.00%	14.20%	301.00%	0.00%
13	MCB-Arif Habib Savings and Investments Limited	9.01%	518.65%	0.00%	16.54%	454.72%	7.79%	-5.09%	311.03%	60.84%
14	National Investment Trust Limited	20.45%	1.36%	0.00%	23.50%	72.61%	0.00%	-3.14%	-8.49%	8.86%
15	NBP Fullerton Asset Management Limited	-11.21%	235.30%	1.23%	-4.01%	174.92%	90.22%	40.00%	467.29%	39.22%
16	Pak Oman Asset Management Company Limited	-65.80%	-246.25%	0.00%	11.73%	157.58%	0.00%	132.30%	495.25%	0.00%
17	Primus Investment Management Limited	13.59%	45.13%	-107.33%	-12.95%	30.98%	16.78%	36.72%	581.06%	0.00%
18	UBL Fund Managers Limited	20.74%	910.39%	194.76%	9.33%	459.25%	-2.12%	29.87%	320.90%	35.47%
	Total	183.41%	3314.28%	234.88%	169.56%	2941.91%	5120.58%	407.19%	3869.65%	620.97%

Table 2
Net assets under management of AMC's in the open-ended category of mutual fund industry

No. of AMC's	Asset Management Companies	Net Assets (Rupees in billion)																				
		FY 09-10			FY 10-11			FY 11-12			FY 12-13			FY 13-14			FY 14-15			FY 15-16		
		Exist ing Funds	Ne w Funds	Tot al	Exist ing Funds	Ne w Funds	Tot al	Exist ing Funds	Ne w Funds	Tot al	Exist ing Funds	Ne w Funds	Tot al	Exist ing Funds	Ne w Funds	Tot al	Exist ing Funds	Ne w Funds	Tot al			
1	ABL Asset Management Company Limited	8.74	-	8.74	5.52	0.83	6.35	5.23	34.84	40.07	6.29	0.64	6.93	10.20	-	10.20	17.88	-	17.88	22.23	3.35	25.58
2	Limited AKD Investment Management Limited	1.11	-	1.11	1.06	-	1.06	0.95	0.10	1.05	1.93	-	1.93	2.15	-	2.15	2.32	-	2.32	3.15	-	3.15
3	Meezan Investment Management Limited	15.27	0.97	16.24	28.77	-	28.77	36.90	0.29	37.19	40.93	0.70	41.63	51.75	2.07	53.82	59.64	3.08	62.72	69.38	6.37	75.75
4	Limited Alfalah GHP Investment Management Limited	4.47	1.82	6.29	7.10	-	7.10	8.91	-	8.91	9.05	-	9.05	10.09	0.51	10.60	17.12	-	17.12	16.14	4.30	20.44
5	Limited Askari Investment Management Limited	1.53	1.52	3.05	8.88	-	8.88	12.12	0.92	13.04	10.23	-	10.23	9.62	-	9.62	8.04	-	8.04	8.85	-	8.85
6	Atlas Asset Management Limited	2.53	1.41	3.94	5.45	-	5.45	7.15	-	7.15	8.30	-	8.30	12.33	0.17	12.49	14.62	0.60	15.22	18.05	-	18.05
7	BMA Asset Management Company Limited	0.36	0.84	1.20	0.80	-	0.80	1.17	-	1.17	1.03	-	1.03	0.62	-	0.62	0.52	-	0.52	0.42	-	0.42
8	Limited Faysal Asset Management Limited	8.64	0.33	8.97	6.17	0.58	6.75	4.94	-	4.94	5.34	-	5.34	7.98	0.39	8.38	7.70	-	7.70	8.38	0.37	8.75
9	Limited Habib Asset Management Limited	1.70	0.13	1.83	1.37	0.57	1.94	3.16	-	3.16	3.35	0.36	3.71	4.70	-	4.70	2.71	-	2.71	2.61	-	2.61
10	Limited HBL Asset Management Limited	4.48	-	4.48	4.89	7.30	12.20	19.33	0.12	19.45	22.25	-	22.25	27.20	0.90	28.10	21.34	1.93	23.28	24.64	1.35	25.99

(Table Continued...)

11	JS Investments Limited Lakson	8.66	1.42	10.08	10.64	-	10.64	10.34	-	10.34	11.97	0.45	12.42	13.25	-	13.25	8.12	-	8.12	7.72	0.30	8.02
12	Investments Limited MCB-Arif Habib	3.00	-	3.00	4.15	-	4.15	6.88	1.03	7.91	13.27	-	13.27	10.64	-	10.64	10.56	-	10.56	12.15	-	12.15
13	Savings and Investments Limited National	19.49	6.53	26.02	27.42	0.18	27.60	41.43	-	41.43	34.24	-	34.24	37.31	-	37.31	42.67	0.74	43.41	39.94	0.80	40.74
14	Investment Trust Limited NBP Fullerton	30.16	6.04	36.19	45.53	-	45.53	47.25	-	47.25	55.77	-	55.77	67.35	-	67.35	79.39	4.36	83.75	79.84	0.87	80.72
15	Asset Management Limited Pak Oman	12.85	0.59	13.43	16.42	0.66	17.08	21.59	23.99	45.58	45.16	-	45.16	37.62	2.43	40.06	31.34	3.56	34.90	43.71	6.51	50.21
16	Asset Management Company Limited Primus	0.46	-	0.46	0.78	-	0.78	0.51	0.26	0.76	0.85	-	0.85	0.40	-	0.40	0.44	-	0.44	1.20	-	1.20
17	Investment Management Limited UBL Fund	-	-	-	-	-	-	-	-	-	7.01	-	7.01	7.30	0.33	7.63	6.43	0.12	6.54	7.57	1.39	8.96
18	Managers Limited	18.53	-	18.53	21.13	4.39	25.52	42.04	4.65	46.70	30.75	0.95	31.70	36.61	1.25	37.86	37.31	3.30	40.61	40.68	12.61	53.30
	Total net assets	141.95	21.60	163.55	196.09	14.51	210.61	269.89	66.20	336.09	307.71	3.10	310.81	347.12	8.06	355.18	368.15	17.70	385.85	406.66	38.21	444.87

Table 3
Funds Induction by AMCs as Open-Ended Funds.

No. of AMCs	Asset Management Companies	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	New Funds
1	ABL Asset Management Company Limited	2	4	5	5	6	6	12	10
2	AKD Investment Management Limited	3	3	4	4	4	4	4	1
3	Al Meezan Investment Management Limited	6	6	6	7	10	12	16	10
4	Alfalalah GHP Investment Management Limited	8	9	9	9	9	10	13	5
5	Askari Investment Management Limited	5	5	6	7	7	7	7	2
6	Atlas Asset Management Limited	5	5	5	5	6	7	7	2
7	BMA Asset Management Company Limited	2	2	2	2	2	2	2	0
8	Faysal Asset Management Limited	4	6	6	6	7	7	8	4
9	Habib Asset Management Limited	2	3	3	4	4	4	4	2
10	HBL Asset Management Limited	4	7	10	10	10	13	14	10
11	JS Investments Limited	7	8	8	8	9	9	9	2
12	Lakson Investments Limited	3	3	6	6	6	6	6	3
13	MCB-Arif Habib Savings and Investments Limited	11	11	12	12	12	13	14	3
14	National Investment Trust Limited	3	3	3	3	3	3	5	2
15	NBP Fullerton Asset Management Limited	8	10	12	12	13	17	21	13
16	Pak Oman Asset Management Company Limited	3	3	4	4	4	4	4	1
17	Primus Investment Management Limited	0	0	0	2	5	6	6	6
18	UBL Fund Managers Limited	5	7	8	11	13	14	19	14
	Total Number of Funds	81	95	109	117	130	144	171	90
	Percentage of addition of new funds	9%	17%	15%	7%	11%	11%	19%	
	Number of addition of new funds	7	14	14	8	13	14	27	

Table 4

*Summary of Regression Results. Note: *, ** and *** indicates statistical significance at 1, 5 and 10% levels respectively. t-Statistics in parentheses.*

Variables	Common Effect	Random Effect	Fixed Effect
Intercept	0.100452 (2.095707)**	0.100316 (2.047198)**	0.090951 (1.817617)***
EFS	00.071938 (3.215536)*	0.072010 (3.187366)*	0.076030 (2.938044)**
NFS	0.07859 (5.593181)*	0.079054 (5.555340)*	0.085638 (5.021082)*
R2	0.363518	0.364346	0.522100
Adj. R2	0.346315	0.347167	0.339629
F-Statistic	21.13198*	21.20781*	2.861278*
Hausman Test	0.560960 (0.7554)	LM Test	LM Test 29.441602* (0.0000)

Finally, in the second case scenario, and in order to test our third hypothesis, an individual fund is been separated from its family by following (Elton et al., 2007; Choi et al., 2016 & Chan et al., 2016) by taking averages for the family (excluding the fund) and then the individual firm. The effect of the same has been tested under OLS regression. To find the effect of growth of funds family on the single fund of the same family as mentioned above, we found that family performance significantly affect individual firms' performance with the results being reported in table 5 below. These findings are in line with those of Bessler et al. (2016).

Table 5

*Regression Results. Effect of Family growth performance on Fund performance. Note: *, ** and *** indicates statistical significance at 1, 5 and 10% levels respectively. t-Statistics in parentheses.*

Variables	Within Family	Outside Family
Intercept	0.0484 (2.350)*	0.0573 (4.001)*
Fund	0.7187 (2.989)*	0.3047 (6.589)*
F-Statistic	43.42368*	8.94*
Adj. R2	0.0847	0.2410

Conclusions

AMCs strive to channel and pool savings and invest these in well diversified portfolios in an optimal way. The size of these portfolios is closely related to their AUM. This study in particular examined the effects of fund sizes-mainly the induction of new funds and the increase in existing funds, managed by AMCs on their AUM for the mutual fund industry of Pakistan. Furthermore, we assessed that whether Fund Family growth has any effect on individual fund. We examined a total of 180 open ended Mutual funds, managed by 18 AMCs over the period of July-2009 to most recent July-2016. The main findings suggests that both existing and new fund size are having positive and significant impact on AUM and also the growth of fund is strongly associated with Family growth. Our findings are consistent with those of Pollet et al. (2008), Chan et al. (2016) and Bessler et al. (2016). It was further observed that those AMCs who introduced new funds during this period, were managing relatively large assets as compared to those who introduced small amount of new funds or did not inducted any new fund at all during the period under consideration. However these findings are not in line with those of Chan et al. (2016) Pollet et al. (2008) and Beckers and Vaughan (2001).

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PERSPECTIVE OF MANAGEMENT SCIENCE STUDENTS TOWARDS THE USAGE AND IMPORTANCE OF BUSINESS ENGLISH AT A PRIVATE SECTOR BUSINESS SCHOOL

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Abstract

Business English has been in the spotlight because international business contexts regard English as an international lingua franca. This study aimed to explore perspective of management science students towards the usage and importance of Business English at a private sector business school. The study was conducted using quantitative approach through the use of survey in which the usage and importance of Business English was analyzed using the data that was collected on the perspectives of the students. The research was conducted in a private sector business school. A total of 105 students participated in filling in the questionnaires. Convenience sampling was used as the sampling technique in this study because the researcher collected data from the students he taught in the research site. The data was analyzed with the help of simple descriptive statistics. The findings showed that overall score of 18.71 out of total 28 points reflects that the students are concerned and they do give high weightage (of 66.8%) to business English in their lives. 72% students acknowledged that business English is essential for their future prospective. Therefore, it may be concluded that there is a need to fill the gap between the demand of Business English and ability to use it.

Keywords: Business English, Business School, Business Communication Skills, Private Sector.

JEL Classification: Z000

Introduction

Language has connected people across the globe, and it has made it possible for them to conquer knowledge in almost all domains of life and more. With the expansion of modern communication technology, multinational organizations have established themselves across the world. Globally, people of international business use business English among themselves. In this context, business

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English classrooms offer a genuine prospect of practicing business English which is vital in actual life business circumstances. Rao (2017) assert that business and management are an unavoidable element of the society which may be national or international using business English as the principal source of language. The business community prefers business English as the language of trade.

According to Anderson (2010), almost six thousand nine hundred and nine languages are spoken around the world. With so many languages, the communication gap between people and nations has widened and broadened. According to Raja (2013), "Communication has become one of the markers of social solidarity, social ranking and professional capabilities and most of the components of the language are learnt through this medium" (p. 154). Business English has reduced these communication gaps and business english has functioned as a global lingua franca. This language has become a bridge for the acquisition of knowledge and skills. Crystal (2000) estimates that around 1.5 billion people speak English either as native, second or foreign language. English is a widely used language in the world and it is a major source of information access and retrieval for students. This makes it important for English teachers to be more sensitive towards their teaching and they should ensure that students get good command on this language. According to Lee (2000), English Language teachers should take responsibility; they should facilitate students and make them feel citizens of a global classroom, practicing business English on a global level. Today English language has more non-native speakers than native speakers. Crystal (1997) calls English a truly global language. It is English language that acts as a bridge that links us and the outside world. It is the learning of this language which can make people a member of the global village.

With the ever growing demand of business English lately, research on business English has been undertaken at a massive level. Business English has been in the spotlight because international business contexts regard English as an international lingua franca. Research on business communication skills and strategies (Chew, 2005; Louhiala-Salminen, 1996) started by investigating frequently used business communication skills, but then shifted its focus into communication strategies for effective communication in business, applying the findings and the implications of discourse analysis research on business English use. Therefore, its importance is undeniable for the countries like Pakistan where it happens to be the only language that connects her with other countries of the world. Besides its value in trade, commerce and many other fields, its significance in higher education is increasing rapidly as well. According to Sim (2012), English is unquestionably the international language of business and because we are living in a world of business changing as rapidly as it has never had before, we find ourselves in front of new and ever growing challenges when it comes to teaching Business English.

In order to compete internationally, it is imperative that students in Pakistan, especially those pursuing higher education needs to be proficient in Business English. According to Jenkins (2003), "Currently, there are approximately seventy-five territories where English is spoken either as a first language (L1), or as an official (i.e. institutionalized) second language (L2) in fields such as govern-

ment, law and education". Despite the presence of English in almost every level of the Pakistani education system and the abundant amount of time students spend on it; many students have expressed their concerns about not being capable of using English proficiently. There have been many attempts to help students improve their language proficiency of business English and increase their motivation and confidence to use it proficiently. This study looks into issues related to the usage and importance of business English in the perspectives of management science students at a private sector business school in Karachi, Pakistan. For this study, a total of 105 students, participated in filling in the questionnaires.

Aim of the Study

The study aimed to find out perspective of management science students regarding the usage and importance of Business English as a mean of communication at a private sector business school.

Research questions:

1. Which medium do the students of management sciences use and prefer at a private sector business school for the purpose of communication, instruction and studying?
2. What is the attitude of the students of management sciences students studying in a private sector business school towards Business English?
3. What do the students of management sciences students studying in a private sector business school think about Business English regarding their future careers?

Significance of the Study

The status of English in education should be determined with due consideration of its expanding functions. This study attempted to find out the ideas, ideologies, opinions, views, and attitudes of the management science students towards Business English. English is a global language, it has become very important especially for teachers and students to learn and use this language not only to become the citizens of the vast shrinking world but also to compete internationally. Raja (2017) asserts that, "in today's world, good communication skills are needed the most at all level" (p. 97) and Business English is used for communication globally.

English Courses in Research Site

The private sector business school chosen as the research site offers three English courses to its students. No student is eligible to take an advance course without passing the pre-requisite courses. These three courses include Business English, Public Speaking and Official Communication & Report Writing. Each English course which is offered in this institute is of three credit hours (i.e. 30 sessions of 1.25 hrs. each session) in a semester. Keeping the current market trend and the important role of English in students' professional lives, great emphasis is given to spoken English besides

writing skills. Various language promoting activities and events are organized in each English course at this university and participation of the students taking English courses is mandatory in these activities and events. These include declamations, debates, 'rapid fire speech' contests, formal presentations, 'advertisements', turn back speeches, dramatics and skits, poster exhibitions, 'English supermarkets', parliamentary debates, simulation of business meetings, interviews, story narration competitions, and the rest. Through these activities, students are exposed to the basic formats and principles of communication in order to strengthen their soft skills for workplace effectiveness and competency building. The focus is on the various forms of written and oral communication that are helpful and, in most cases, necessary in real-life business situations or in personal life. This helps the participants in their self-analysis as well as appraisal by their colleagues. With a view to create awareness and appreciation among the students of their existing level of communication skills, their participation in the activities and the projects ensures that they sharpen up their receptive as well as expressive communication skills.

English has been a major cause of tension and social division between the elite and the 'Englishless' (Sultana, 2012, p.50) masses, in the countries that were once colonized by an English speaking nation, such as Philippines (Tollefson, 2000), Nigeria, Tanzania, and Kenya (Bamgbose, 2003), India (Bhatt, 2005), or Sri Lanka (Canagarajah, 1999). The English ruled India for less than a century but English arrived here much earlier and it seems that it will never leave the subcontinent that now includes Pakistan, India and Bangladesh. English in these countries is playing a vital role in all walks of life. Pakistan, being part of the British colony till 1947, is also a multicultural and multilingual society. Pakistan's language policy in education keeps taking turns with different governments. Urdu was declared the national and the primary official language of the country, English the language of knowledge, technology and international communication as an important second language (University grants commission report, 1982).

Abbas (1998) writes that the educational policy declared English a compulsory subject for B.A, B.SC degrees. All science subjects would be taught in English. Some humanities subjects would be optionally taught in English otherwise, students would be taught and examined in Urdu. There came a time when efforts were made to replace English with Urdu. It was expected that English would be phased out at the provincial as well as federal level but after so many years, English is the code in which most of the official communication is carried out. According to Rahman (2004), national language (s) was supposed to replace English eventually as an official language by a certain date, but many such dates matured and expired and English persisted to be as firmly engrained in the realm of supremacy as it had been at the time of its inception. According to (2014, p.87), "Although, mother tongue serves as the best mode of instruction at the primary school level for the cognitive growth of pupil, Urdu, the national language, which is the second language for most Pakistanis as well, is preferred".

Ghose (2005) writes that there is no longer a need to consider the argument for and against the retention of English as a means of communication, scholarship, research, management, finance

and education. She argues that as globalization spreads, it brings with it greater demand for people who know the English language. The literature review reveals that problems of English comprehension at the tertiary level are found in several Asian countries including Pakistan, India, Bangladesh, Sri Lanka, etc.

Sultana (2003) investigated the reasons of students' failure in English at the tertiary level in Bangladesh. In Bangladesh soon after independence English was made a compulsory subject at the primary and secondary level and the medium of instruction at the tertiary level and chief means of formal communication. In 1974, the education commission of Bangladesh though realized the importance of English but did not put forward any recommendation for keeping English as a compulsory subject in the universities. This resulted in confusion about the medium of instruction, in some it was Bengali and in others it was English and in few others, it was the mixture of the two. Out of this confusion, a contradictory situation evolved where officially and overtly Bengali was encouraged in all spheres of life but people having good English proficiency were with better job opportunities. Similarly in Pakistan, though English enjoys the status of co-official language with Urdu, it is also considered the symbol of prestige. In most educational institutes of Pakistan, English is dominantly used and in some cases students are fined for the use of any language other than English. In government schools of Pakistan, Urdu is dominantly used and in average private sector institutes a blend of both languages is followed. Consequently, those with better proficiency in English find better job market and better professional prospects. To combat this imbalance, students and even professionals register themselves in certification courses at various institutes. They invest a lot of money and time to improve their English language skills.

Methodology

This research was conducted using quantitative approach through survey to explore perspective of management science students towards the use and importance of Business English in a private sector business school. The respondents, who filled in the questionnaire in this study, were 105 students. These students were fresh admissions and were enrolled in the Business English course.

Data Collection Tools

Questionnaire was used as the data collection tool. It consisted of ten closed ended questions, and 105 students filled in the questionnaire. Questionnaire was chosen because it is a time efficient technique of gathering data from a large population and roughly the same information is obtained across the respondents which help in data analysis.

Sampling

Convenience sampling was used in this study. According to Larvakas (2008), 'convenience

sampling is a type of nonprobability sampling in which people are sampled simply because they are "convenient" sources of data for researchers' (p.149). 105 management science students who were taught Business English were taken as participants for this study.

Data Analysis

The questionnaire consists of close ended questions. A total of 105 students filled the questionnaire. Simple descriptive statistics was used to analyze the close ended questions and the same were presented with the help of bar graphs. Later, they are also analyzed and interpreted using a table (See appendix 2). The sample size drawn for this study was taken from one business school. This study can be further extended by increasing the scope of population by other researchers. This section of the research elaborates and analysis the data collected from the management science students of a private sector business school with the help of the questionnaire

1. You like/prefer reading reference books in _____.

Table 1

Language Preferences for Reading Reference Books

Udu	English	Both
2.8%	57.1%	40.1%

In this questionnaire item, 3 options were provided to students. Only 2.8% students opted for Urdu as a choice whereas 57.1% students chose English as an option to suggest their preference of reading reference books. 40.1% students opted for the third option 'both' as their preference of reading reference books.

2. What should be the medium of education at university level?

Table 2

Medium of Education Preferences

Udu	English	Both
5.7%	51.4%	42.9%

In this questionnaire item, figure 2 shows that only 5.7% students opted for Urdu as medium of instruction at university level. 51.4% students showed their preference for English and 40.2% students choose the third option 'a mixture of both'.

3. Your proficiency level in English language is _____.

Table 3
Language Proficiency

Poor	Fair	Good	Excellent
8.5%	36.3%	49.5%	5.7

In this questionnaire item, figure 3 shows that 8.5% students confessed that their English language skills are poor. 5.7% students claimed that their English language skills are excellent. 36.3% students opted for option B 'good' and the other 49.5% students stated that their English language skills are fair.

4. What percentage of subject related reading material is available in English?

Table 4
Availability of Subject Related Material in English

25%	50%	75%	100%
8.6%	11.4%	17.1%	62.9

According to figure 4, 8.57% students believe that 25% subject related material is available in English and 11.42% students believe it to be 50%. A group of 17.1% students think that 75% subject related material is available in English and the other 62.8% students opted for the fourth option '100%'.

5. When someone outside the classroom speaks English, he/she is thought to be?

Table 5
Perception towards Students Speaking English

Snobbish	Rude	Educated	Show Off
0.0%	0.0%	47.7%	52.3

Figure 5 reveals that 0% student thinks of other students as snobbish or rude when they speak English outside the classroom. In fact 47.7% students indicated that these students are considered educated, however 52.3% students believe that when someone speaks English outside the class with others, he/she is showing off their English language skills.

6. Students taking exams in English get better marks.

Table 6
Perceptions towards Earned Grades

Always	Sometimes	Never
45.7%	42.9%	11.4%

As shown in figure 6, 45.7% students think that those taking exams in English get better marks, 5.7% students disagreed with the statement. 42.9% students said sometimes students taking exams in English get better marks and 5.7% students opted for the last option 'never'.

7. What language does your teacher deliver the lectures in?

Table 7
Medium of Instruction in Class

English	More in English	Urdu	Urdu
21.9%	44.7%	30.6%	2.8

As shown in figure 7, 21.9% students opted for option A, which is teachers deliver their lectures in English. 44.7% students said that teachers deliver their lectures more in English. 30.4% students claimed that lectures are delivered more in Urdu, whereas only 2.8% students said it is delivered in Urdu.

8.How important is English for your future career?

Table 8
Importance of English for Future Career

Strongly Agree	Agree	Neutral	Disagree
72.3%	25.8%	1.9%	0.0%

According to figure 8, 72.3% students agreed that English is very important for their future career. 25.7% believed it to be important. Only 1.9% thought that it is somewhat important, whereas 0% believed it to be unimportant.

9.When do you feel the need to communicate in English?

Table 9
The Need to Use English

When Talking to a Teacher	During Classroom Discussion	Both	Never
24.7%	8.5%	66.8%	0.0%

Figure 9 reveals that 66.6% students think they feel the need to communicate in English when they are talking to the teacher or during the classroom discussion. 24.7% students feel the need to communicate in English when they talk to a teacher. Only 8.5% said they feel the need to communicate in English during classrooms discussions, whereas 0% opted for the option never.

10. According to you English language has become

Table 10
Perception towards Importance of English in Society

The language for Better Communication	The Language of Knowledge	The Language of Elite Class of Society	All of the Above
43.8%	20.9%	18.2%	17.1%

As shown in figure 10, 43.8% students said that English is used as a language for better communication. 20.9% said that is the language of knowledge. According to 18% students, it is the language of elite class of society and only 17.1% students opted for option all of the above.

In order to have an objective analysis and conclusion about the replies/ preferences of the students surveyed, the replies of 105 students on all the ten questions of the survey have also been assigned numeric values for onward consolidation. This consolidation is done to conclude overall rating about both the usage of English and importance of English, being reflected by the participants of the survey. Furthermore, in order to understand overall results of usage of English and importance of English separately, this overall result has been bifurcated into two parts, i.e. usage of English and importance of English. The methodology to calculate these results is given in the following FOUR steps:

Step (i): Allocation of Maximum Score for Each Question - Considering the number of options available in replying a question of the survey, each question has been allocated maximum marks/ scores equal to the number of options. For example, maximum score of 3 for question numbers 1-5, 7-8, and 10 and maximum score of 2 for question numbers 6 and 9. Therefore, the maximum total score for all the ten questions will be 28 ($= 8 \times 3 + 2 \times 2$).

Step (ii): Allocation of Priority Weight for Each Option in a Question - Within all ten questions, each option was allocated a score according to its priority. The option with highest priority was given the highest score and the option with second highest priority was given second highest score and so on. This scoring method enables us to have high scores reflecting high preferences for usage and importance of English and low scores reflecting low preferences for usage and importance of English.

Step (iii): Calculation of Weighted Score for each Question - Now for each question, the score obtained out of maximum score allocated (in step (i) above) to the question will be calculated. For this, firstly, weighted score for each option within the question will be calculated by multiplying the

frequency (total number of students who opted for the option) of each option with the priority weight (in step (ii) above) of the related option. Then, for each question, the sum of weighted scores of all options will be divided by the sum of related frequencies.

Step (iv): Calculation of Overall Score for All Questions - The sum of scores obtained in all the ten questions will be divided by the sum of maximum scores of the ten questions. This is the overall preference measured in quantitative terms of all 105 students surveyed for the usage and importance of English for them. The interpretation of the result of 66.8% is that on a scale of zero to 100, the preference of students surveyed is rated as 66.8 (roughly on higher side if not very high).

Furthermore, in order to have more insight of the student preferences, all the ten questions of the survey have been segregated into two categories of "usage of English" and "importance of English". For example, question numbers 1, 5-7, and 9 have been categorized for usage of English and question numbers 2-4, 8, and 10 have been categorized for importance of English. Now by repeating the above mentioned steps from (ii) to (iv), overall preferences of 105 students for the questions of usage and importance categories may be calculated separately.

Conclusion

Out of the sample of one hundred and five, majority of the students agreed that they do not possess excellent proficiency in business English. Fifty two percent students considered other students showing off who speak English outside classrooms. It implies that these students possess negative attitude towards other students who practice using English more regularly. However, when they were asked if they think that English language is important for their future career, about seventy two percent students acknowledged that it is essential for their future prospective. The study clearly indicates that management science students accept Business English as a key determiner to their future growth but they are reluctant to use it in their classrooms at the same time.

Also, the usage of English and importance of English is presented via the overall score of 18.71 out of total 28 points which reflects that the students are more concerned and do give high weightage (of 66.8%) to Business English in their lives. However, if the overall weight of 66.8% is bifurcated into two aspects of "usage" and "importance" in their lives, it is found that they give more weight (73.2%) to importance than to its usage (59.5%). It means that the demand for Business English is more (due to higher importance of 73.2%) than is being practiced (due to lower usage of 59.5%). Therefore, it may be concluded that there is a need to fill the gap between the demand of English and the ability to use it.

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GAINS AND COSTS ASSOCIATED WITH RESUMPTION OF SSFs WITH STRINGENT REGULATIONS: A MODIFIED APPROACH

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Abstract

To curb the negative effects of Global Financial Crisis (GFC) in 2008, the regulatory bodies of Pakistan Stock Exchange (PSX) banned trading in the stock market. Trading in several financial instruments suffered due to this unavoidable situation. On the recommendations of CFS MK II review committee, trading in futures markets were also halted. As the situation got better, trading in the stock market resumed. With this, trading in Single Stock Futures (SSFs) resumed on July 27, 2009 with stringent regulatory requirements than before. This situation makes it important to investigate the role of newer SSFs with stringent regulations. This study investigates the stakeholders' claims on destabilizing ability of futures markets in this crucial stage. This is done by examining the impact of resumption of trading in SSFs contracts with stringent regulations on the market efficiency and volatility of the stock prices of the underlying counterparts. The results of this study do not present any significant change in the market efficiency and volatility of SSFs' underlying stocks and Non-SSFs' stocks. This study has two implications. First, the SSFs did not play any part in destabilization of Pakistan's Stock market during GFC. Second, the stringent regulations have helped mitigate the destabilizing ability of futures markets in Pakistan.

Keywords: Resumption, Stringent, Modified Approach, Stock, Market Efficiency.

JEL Classification: G190

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Introduction

Equity derivatives⁴ are newer financial instruments, which have different trading regulations from other already available financial instruments in the market. As a rule, the introduction of futures markets in any economy provides solution to two concerns. First, it provides the investors/traders with an opportunity to hedge the risk inherent in the future. The participants of the market are always interested in transferring the risk to others. Second, futures as a product provide much necessary liquidity to the market. This argument leads the researchers to hypothesize that the presence of parallel futures can enhance the market efficiency of the stock market as well. The introduction of futures markets and their impact on different dynamics of the market has gained attention of the regulators, practitioners and academicians alike since their formal introduction in 1970s. Several methodological approaches and econometric techniques have been used to answer the question of their destabilizing ability for the financial market as a whole.

With respect to market efficiency, a theoretical explanation against future markets is the destabilization aspect of future trading. It is argued that parallel futures markets provide an additional channel of information. This channel not only helps in development of new information but also routes this information to the underlying spot market. This increment in magnitude and speed of information can result in hyper volatility in the market (Cox 1976; Ross 1989). They assert that the new information takes lesser time to adjust in futures prices than their underlying counterparts. Through arbitrage mechanism, this information flows to the underlying market. This adds to market efficiency of the underlying market, while enhancing the volatility of the prices. Bae, Kwon and Park (2004) studies this relationship in Korean Market by using Partial Adjustment Model. The same was replicated in Indian Context by Debasish (2009). Both used index futures for the subject purpose.

This study derives its significance from the following aspects: Malik and Shah (2017) report that former SSFs did not play any role in destabilizing (in terms of market efficiency and volatility) the overall market. This study extends on that study and takes into account the case of resumption of SSFs. Further, the debate on alleged destabilization caused by SSFs intensified in Pakistani market after the financial crisis of 2005 and 2008. Consequently, prevailing futures markets were blamed as one of the factors of the crisis (Khan 2006; Naz 2011). With respect to GFC of 2008, similar claims were made by international authors. For example, Simkovic (2009) asserts that Credit Default Swaps (CDS), Collateralized Debt Obligations (CDOs) and Mortgage Backed Securities (MBS) had their share in the GFC. Recent Studies⁵ show that financial crisis in one country has spill over impact, and it affects the financial markets in other economies. These studies assert that misuse of derivatives provides basis for financial crises, and become reasons for accelerated capital outflows. This enhances

⁴ Throughout this study, the terms derivatives and futures are used interchangeably

⁵ Lien and Zhang, 2008, Krugman (2003), De Bandt and Hartmann (2000) and Wolf (1999) etc

the flow in the international capital, which sets the tone of crisis by making uncertain. Several studies⁶ in emerging markets provide mixed characteristics of futures markets. These studies highlight their positive and negative roles before and amid crisis. Ahmad, Shah, and Shah (2010) point out the relevance of this debate in local context. These situations warrant investigation for the role of futures in the market.

The introduction of SSFs in Pakistan Stock Exchange (PSX) goes back to July 1, 2001. SSFs with different maturities were launched at different time intervals. First off, SSFs with maturity of one month were introduced. Later SSFs with maturity of 60 days and 90 days were also introduced. The investor/trader of the market took some time to realize the value and importance of trading in SSFs. The trading volume grew significantly after first few years of low levels of trading volume in SSFs. In 2004 and 2005, trading in SSFs constituted 40% of the overall trading volume of PSX. The pros and cons of trading in futures remained an important topic before, amid and after the GFC. The Pakistan's local market also witnessed the shocks of GFC.

Following GFC, the trading in PSX was also halted for some time. The trading in SSFs were resumed on July 27, 2009. The newer SSFs had different features⁷ and improved risk management measures. The tightening of rules for SSFs is not backed by any empirical study. To decrease the effect of futures markets on stock market volatility, stringent regulations have been adopted for resumed SSFs. While these stringent regulations may or may not reduce the overall volatility of the market, they definitely will add costs to the market participants of futures markets. Since regulations are costly, it is important to study the potential impact of parallel futures markets on stock market volatility. Therefore, there is a need to assess this transitional situation. The outcomes of this study will be important to regulators and officials in improving contract specifications and trading mechanism for derivatives contracts. This will improve the features of futures as a better risk management tool. The objective of this study is to investigate the impact of resumption of SSFs contracts trading on market efficiency and volatility (tradeoff between gain & loss).

This study contributes to the literature of futures markets in the following ways. First, in their studies (Bae et al., 2004; Debasish 2009) used the futures index data to investigate the simultaneous change in market efficiency and volatility (Following the arguments of Cox 1976; Ross 1989) in Korean and Indian stock markets, while this study makes use of SSFs for the said purpose. The use of SSFs over index futures by this study has following rationales, which could be confirmed from the study of McKenzie, Brailsford, and Faff (2001). 1) Exact impact would be more evident by the use of SSFs over Index, which cannot be traded directly. 2) Easy/flexible application of rules on SSFs than

⁶ IMF (2002), Dodd (2000), Kregrel (1998) and Garber (1998)

⁷ Strictness in regulations for re launched SSFs from former SSFs are. 1) Costly bank/cash margin 2) Application of special margin instead of concentration margin, and 3) Holding of mark to market profit by exchange.

index. Second, unlike (Bae et al., 2004; Debasish 2009) this study makes use of ARIMA-EGARCH specification to measure the volatility for pre and post SSFs periods. They used partial adjustment model to study the relationship between market efficiency and volatility. Third, this study makes simultaneous use of Generalized Error Distribution (GED), student's t along with normal distribution⁸ to incorporate the fat tails of financial time series data first time ever. Fourth, some studies⁹ have been performed in the context of Pakistan (with different institutional settings than other economies), when the equity derivatives were first introduced. Here the data has been used for resumption period with modified contract specification and expected more informed trader in the market than before.

Following the introduction, this study is divided into the following sections. Section 2 provides related literature review. Section 3 presents the data description and methodology. Section 4 presents results, while discussing them separately for SSFs and non-SSFs. The study is concluded in section 5 by presentation of conclusion and policy implications.

Literature Review

Although Ross (1976) and Hakansson (1982) had proposed in their respective studies that value of a stock should be influenced by the introduction of its own derivative, still SSFs contracts were not traded. In the 1990s, SSFs were introduced in Australia and Hong Kong. They were later introduced in other countries as well, e.g., UK, USA, South Africa, India, Pakistan and Malaysia etc.

Several studies have been conducted in different markets in order to understand the influence of parallel futures markets on dynamics of the underlying spot market. These studies report diverse set of results. The reasons for varying results depend on the geographical locations, methodology employed, data used for analysis, and period used for studying the impact. For example, Bae et al. (2004) investigate the impact of introduction of futures index on spot index. They made use data of KOSPI 200 constituent and non-KOSPI 200 stocks. In order to check the relationship between market efficiency and volatility across introduction of futures markets, they used partial adjustment model. This model theorizes that there is a direct relationship between market efficiency and volatility. They report that higher spot price volatility and lower market efficiency in non- KOSPI 200 stocks in relation to KOSPI 200 index stocks. On similar lines, Debasish (2009) also used partial adjustment model for this purpose in Indian context. He checks the introduction of NSE Nifty index futures trading and their consequent influence on underlying 10 stocks taken from underlying spot market. He

⁸ Bollerslev (1987), Baillie and Bollerslev (1989), Kaiser (1996) and Beine, Laurent and Lecourt (2000), suggested the use of student's t distribution. On the other hand, Nelson (1991), and Kaiser (1996) recommend generalized error distribution for such an instance, on hand.

⁹ Malik and Shah (2017), Khan and Abbas (2013), Khan, Shah and Abbas (2011), Khan and Hijazi (2009) and Khan (2006).

reports that futures trading decreases market/ trading efficiency and volatility simultaneously. This simultaneous decrease in market efficiency and volatility is characterized as gain and cost of introduction of futures markets. On similar lines, Malik and Shah (2017) study the introduction of SSFs on market efficiency and volatility in Pakistan's context by using data from introduction episode. The study made use of CAPM augmented GJR – GARCH approach and conclude that introduction of SSFs have no impact on market efficiency and volatility. Tarique and Malik (2018) also report mixed results for economies abbreviated as BRICs.

On the basis of empirical results regarding destabilizing impact of derivatives trading, previous studies could be divided into three categories. First category of studies¹⁰ suggests that introduction of futures trading increases volatility in the spot returns. This destabilizes the overall spot market. Second category of studies¹¹ depicts inverse relationship between introduction of trading in derivatives markets and volatility of underlying spot markets. This could be interpreted as introduction of futures market decreases the volatility and stabilizes the market. Finally, the third category of studies¹² reports no influence of introduction of futures trading on underlying spot market.

Studies¹³ in Pakistan's market are inconclusive on SSFs trading and its relationship with underlying stocks. Generally speaking, at theoretical as well as empirical levels, the presence of parallel futures markets and their relationship with underlying spot markets is still under debate.

Data & Methodology

In order to investigate the impact of futures markets on the dynamics of underlying spot market, several approaches have been used in event study methodology. Among these, two approaches have received considerable attention among the investigators and has been used by numerous studies¹⁴. One approach analyzes the pre- and post-futures data sets of SSFs stocks/ index futures /

¹⁰ Harris (1989), Damodaran (1990), Schwert (1990), Lockwood and Linn (1990), Hou and Li (2014) and Xu and Wan (2015)

¹¹ De Beer (2009), Brown Hruska and Kuserk (1995) Santoni (1987) and Nath (2003)

¹² Bohl and Siklos (2015), Board, Sandman and Sutcliffe (2001), Darrat and Rahman (1995), Beckett and Roberts (1990) Smith (1989) Conrad (1989) Grossman (1988) and Edwards (1988a, 1988b) Illueca and Lafuente (2003), Bessembinder and Seguin (1992), Darrat, Rahman and Zhong (2002), and Kyriacou and Sarno (1999)

¹³ Tarique and Malik (2018) Malik and Shah (2017), Malik and Shah (2016), Malik and Shah (2014), Malik and Shah (2013), Khan and Hijazi (2009), Khan (2006) and Khan, Shah and Abbas (2011)

¹⁴ For example, Malik and Shah (2017), Khan and Abbas (2013), Khan, Shah and Abbas (2011), Gahlot and Datta (2011), Chau et al. (2008), Mazouz (2007), McKenzie, Brailsford & Faff (2001), Bae et al. (2004), Galloway and Miler (1997), Antoniou and Homes (1995) etc.

options etc. While, other approach considers non-SSFs stocks as a control sample. Both of these approaches have pros and cons. In order to take benefit of both the approach, this study makes use of both approaches, while employing econometric technique of Mazouz and Bowe (2006). This study makes use of aforementioned approach to investigate the potential impact of resumption of SSFs on market efficiency and volatility.

Market Efficiency Modeling

Cox (1976) argue that existence of parallel futures markets creates and enhances the information flows in the market. He asserts this argument with the help of and empirical evidence. Specifically, he claims that futures prices quickly adjust to the new information. Arbitrage mechanism in the market helps transfer this information to the spot market. Further, he argues that this will result in simultaneous increase in market efficiency and volatility. This argument is supported by the work of Ross (1989), who claims that under the assumption of arbitrage free economy, volatility is directly proportional to the rate of new information approaching the market. The study of Brorsen (1991) is also important with respect to this line of argument. Basically, he extended the argument of Brorsen, Oellermen, and Farris (1989), that futures market affects spot markets. This helps in adjustment of new information in speedy manner, which results in hike in price volatility in the short run. From the above studies, it can be hypothesized that while futures trading provides an additional venue for information generation/ transmission, and that this information set is transferred /reflected in the spot prices, then this would be apparent in spot price volatility. (Brorsen 1991 and Brorsen et al., 1989) provided a mathematical expression, which reflects the relationship between the spot prices (Φ_t) and equilibrium prices (Φ^*_t). They named it partial adjustment process model, which is as follows:

$$\Delta\Phi_t = \Phi_t - \Phi_{t-1} = \gamma (\Phi^*_t - \Phi_{t-1}) \dots\dots\dots (3.1.1)$$

$$\Phi_t = \Phi^*_{t-1} + \mu_t \quad \mu_t \sim N(0, \sigma_\mu^2) \dots\dots\dots (3.1.2)$$

Here, prices are measured using logarithms. $\Delta\Phi_t$ represents the change in stock price. The μ_t is a disturbance term. Gamma γ is a constant, which assumes values between 0 and 1. Further, γ is represents the rate of speed. The speed with which market prices move towards equilibrium prices. Price adjustments are immediate, when γ takes the value 1, otherwise not. Decrease in γ with increase in market frictions is tantamount of market efficiency of any stock. Autoregressive model of the order 1 for stock returns R_t , (price changes $\Delta\Phi_t$) could be rearranged as follows:

$$\Delta\Phi_t = R_t = (1 - \gamma)R_{t-1} + \gamma U_t \dots\dots\dots (3.1.3)$$

In the equation 3.1.3, R_{t-1} and μ_t are independent of each other, and unconditional variance of R_t and R_{t-1} are same, and variation in R_t could be formulated as follows:

$$Var(R_t) = \left[\frac{\gamma}{2-\gamma} \right] Var(U_t) \dots\dots\dots (3.1.4)$$

$Var(\mu_t)$ is the variation in equilibrium prices. This is used as a measure of information flow in prior studies¹⁵. Brorsen (1991) proposed that variance of equilibrium prices could be best estimated by

¹⁵ Bae and Jo 1999; Jones, Kaul, and Lipson 1994; Ross, 1989; Skinner 1989

measuring variation in weekly/monthly price changes.

The first order partial derivative of $\text{Var}(R_t)$ with respect to γ can be written as follows:

$$\frac{\delta \text{Var}(R_t)}{\delta \gamma} = \left[\frac{2}{(2 - \gamma)^2} \right] \text{Var}(\mu_t) \dots\dots\dots (3.1.5)$$

Equation (3.1.5) is a mathematical expression of direct relationship between market efficiency and spot price volatility. This could be interpreted as if market efficiency increases, the spot market volatility of the underlying stock will also increase.

This study calculates calculation of Degree of Market Efficiency (DME) for each stock in pre and post periods separately. For comparison from pre- to post-futures change in market efficiency, paired sample t-test is used.

Volatility Modeling

The Exponential¹⁶ Generalized Autoregressive Heteroscedasticity (EGARCH) process framework was introduced by Nelson (1991). As an extension of GARCH genre of models, EGARCH takes care of asymmetric effect induced by negative and positive shocks. Nelson’s EGARCH model could be expressed as follows:

Let Y_t depicts the day end closing price at time t , which assumes values $t=1, 2, 3, \dots, T$. As a general rule, the rate of return is computed as follows:

$$R_t = \log(Y_t/Y_{t-1}) \dots\dots\dots (3.2.1)$$

In equation 3.2.1, R_t is the rate of return from holding the stock from time $t-1$ to time t . To calculate the volatility of the returns, this study makes use of The ARMA (k, l)-EGARCH framework, which could be presented as follows:

$$R_t = \phi_0 + \sum_{i=1}^k \phi_{t-i} R_{t-i} + \sum_{j=1}^l \theta_{t-j} \varepsilon_{t-j} + \varepsilon_t \dots\dots\dots (3.2.2)$$

$$\ln \sigma_t^2 = \omega + \sum_{j=1}^p \beta_j \sigma_{t-j}^2 + \sum_{i=1}^q (\alpha_i |\eta_{t-i} - E(\eta_{t-i})| + \gamma_i \eta_{t-i}) + \phi dummy + \dots\dots\dots (3.2.3)$$

Underlying Error Distribution

Engle (1982) assumed the error term to follow normal distribution in the GARCH process. Bollerslev (1986) extended the work of Engle (1982). He added lagged conditional variance in the variance equation of the framework. He pointed out that lagged conditional variance should also be

¹⁶ GARCH stands for Generalized Autoregressive Conditional Heteroscedasticity. This model is used to estimate and predict variation in the asset series. EGARCH is an asymmetric extension of GARCH genre of models.

accounted for, while estimating or predicting the conditional variance. Both used Maximum Likelihood (ML) approach for estimation purposes. ML approach states that parameters are conditional upon sample information. And that, probability density is a function of parameters. Normal distribution is widely used. However, the stock returns rarely follow normal distribution. This could be observed by checking the descriptive statistics of the stock returns and its normality tests. Weiss (1986) Bollerslev and Wooldridge (1992) are of the opinion that Quasi Maximum Likelihood (QML) is consistent, if and only if, the conditional mean and conditional variance are specified correctly. This situation changes on departure of error term away from normality. With this line of argument, Engle and Rivera (1991) established that QML provides consistent results. However, it becomes inefficient for non-normal distribution. The degree of inefficiency is more when the distribution of a variable departs away from normal distribution. This has raised serious concerns over the normality assumption of error term in estimation of models. This situation has led the researchers for consideration of other non-normal distributions in parametric analysis. Some other distributions (e.g., GED, student's t etc.) have been used in the literature to take care of this issue. For this study Student's t distribution (Bollerslev 1987) and GED (Nelson 1991) have also been utilized. This has helped in taking care of thick tails.

Finally, Z-test will be used to compare the proportions of simultaneous increase or decrease of DME and volatility.

Data Description

SSFs were launched on July 10, 2001 in PSX. This started with contract listing of ten stocks. However, SECP kept on reviewing the contracts' listing on timely basis, which resulted in listing of more contracts on PSX. By 2008, the total contracts listed as SSFs amounted to 46. When GFC hit the PSX, the whole market remained suspended for few months. Trading in SSFs also remained suspended few months. After recovery from the critical situation caused by GFC, the market was resumed. Alongside others, trading in 18 SSFs were relaunched on July 27, 2009. This time regulation for trading in SSFs were stricter than before. This study focuses on resumption episode, which had stringent regulations than former SSFs. For analysis purpose, the study makes use of one year daily closing prices' observations are used. This dataset is used to investigate the impact of SSFs on market efficiency and volatility of the underlying stocks. This data is collected from online database (www.brecorder.com).

Analysis & Discussion

GARCH stands for Generalized Autoregressive Conditional Heteroscedasticity. This model is used to estimate and predict variation in the asset series. EGARCH is an asymmetric extension of GARCH genre of models. The results are presented in descriptive and inferential statistics form. Table 1 reports the descriptive of SSFs and non-SSFs. Skewedness and kurtosis are presented along with Jarque Berra (JB) and Augumented Dicky Fuller (ADF) tests, which are used to examine the normali-

ty and stationarity of the underlying stock returns distribution. The skewedness, kurtosis and JB report that null hypothesis of normality of underlying distribution was rejected or not in each case. The aforementioned tables also indicate the absence of unit root in each return series using ADF test. Box and Jenkins methodology was used for selection of mean equation ARIMA-EGARCH model. Several provisional equations with varying ARMA orders have been estimated. This order was used after carefully examining the depending upon the Autocorrelation Function (ACF) and Partial Autocorrelation Function (PACF). For each stock, ARMA equations with least Akaike Information Criterion (AIC) and Schwarz's Bayesian Information Criterion (SIC) are selected for later incorporation in ARMA-EGARCH model to measure volatility change. In addition, skewedness, kurtosis, JB test and ARCH effect were examined for further analysis of normality and heteroscedasticity effect.

Results for the market efficiency model are reported in Table 2A, using the partial adjustment process model (equation 3.1.1). The Table reports that degree of market efficiency " γ " (for each stock, it is calculated for pre and post periods for both SSFs and Non SSFs). Comparison of " γ " shows that out of eighteen SSFs, market efficiency has increased for 10 stocks, while it has decreased in the remaining eight stocks. On the other hand, application of similar approach to non-SSFs, resulted an increase in seven stocks, and decrease is observed in remaining nine stocks. Table 2B reports comparison between degree of market efficiency for pre and post periods. Paired sample t-test show insignificant difference between pre and post periods for both SSFs and non-SSFs. On the other hand, volatility is measured using ARIMA- EGARCH model (3.2.2 & 3.2.3), underlying different distributional assumptions for both SSFs and non-SSFs.

Finally, ARIMA-EGARCH model (equations 3.2.2 & 3.2.3) is applied with dummy variable assuming value "1" for pre and value "0" for post period, on each stock, using normal, GED, and t distribution, which ever fitted the best on the basis of JB, skewness and kurtosis. Results are shown in Table 3 and 4. For SSFs, an insignificant increase is observed for 15 stocks while an insignificant decrease is seen in remaining three SSFs stocks. Moreover, for Non-SSFs, an insignificant increase is evident in case of 11 stocks and significant increase in only one stock while insignificant decrease in remaining four Non-SSFs stocks.

Therefore, it may be interpreted that an insignificant change has been observed, both, in DME and volatility. Furthermore, Z test is used to check whether proportion of simultaneously increasing DME and volatility is different from simultaneously decreasing DME and volatility. For SSFs, Tables 5 and 6 report the proportion of stocks with increasing DME and volatility are significantly different (greater) than the ones with decreasing DME and volatility at 10% level of significance. The same test resulted in an insignificant difference for Non-SSFs. This study reports contrasting results from Bae et al. (2004) and Debasish (2009) that report simultaneous increase in former case and simultaneous decrease in later case for both market efficiency and volatility. The study provides similar results, as were provided by Becketti and Roberts (1990) that increased regulations might increase the costs to the market participants, when their destabilizing impact has not been substantiated.

Conclusion

Primarily, this study examined the influence of relaunching of SSFs on market efficiency and price volatility of counterparts in the spot market in PSX. The study used several econometric specifications for ARIMA – EGARCH process. Overall, the results of the study do not show consistent patterns in potential change in market efficiency and volatility. This study employed control sample methodology while examining the influence of resumed SSFs. Once again, the results of the study fail to report consistent pattern in the price volatility and efficiency of non- SSFs stocks. By analyzing both SSFs and non-SSFs, it could be narrated that the results of this study are in line with some of the prior studies. Further, it could be concluded from the discussion that trading in SSFs should not necessarily be linked with futures markets. There could be two potential reasons for these results. First, the stringent regulations of newer SSFs helped in reducing the beneficial destabilization of the market. Second, the allegations against former SSFs did not have any value. Apart from these two main reasons, there could be other reasons for potential changes as well. For example, stock, industry or macroeconomic factors.

This study reports little or no impact of parallel futures markets in destabilizing the underlying market. It can be concluded that circuit breakers and high margin rates can be useful for some other reasons, while their depressing impact on the trading volume of futures is unlikely to reduce the stock market volatility.

It is important to highlight that futures are still in its infancy phase. The rules and regulations for cash settled index options contracts are under review. The findings of this study might have implications for both of these situations. Yet, the findings of this study should be interpreted with care. It is possible that SSFs have no destabilizing effect on spot market as our results recommend; still, it is also conceivable that the SECP is very conservative in its strategy for selection of SSFs' stocks and designing stringent regulations for futures' trading, thereby restraining the role of futures in destabilizing the underlying spot market. Such alternative explanations for no-destabilizing effect of futures on underlying spot market in KSE can be investigated in future research studies. Such an investigation is imperative because if futures are not the reason for destabilization in the spot market, then excessive stringent regulations are not desirable because they reduce the liquidity and efficiency of the overall market.

Table 1
Descriptive statistics for SSFs and Non-SSFs stocks

Panel A: Descriptive statistics for SSFs					Panel B: Descriptive statistics for Non-SSFs				
SCRIP	Sk	KT	JB	ADF	SCRIP	Sk	KT	JB	ADF
OGDC	-0.32554	2.873254	0.209805	-12.4669*	ABL	-0.2625	3.0211	2.8535	-13.3071*
MCB	-0.154395	2.381254	4.9438***	-13.6362*	APL	0.1652	81.4152	63540.26*	-18.0055*
PPL	-1.677695	15.19358	1652.735*	-17.0239*	ARL	-0.1526	2.0358	10.5683*	-12.1561*
HUBC	0.095563	4.456982	22.31304*	-15.1798*	DHC	0.0549	2.4916	2.7953	-12.1904*
PSO	0.147066	2.550685	2.980098	-14.2804*	EFU	-0.0481	2.0631	9.1661**	-11.7300*
POL	0.138458	2.416299	4.313023	-14.0836*	FCCL	0.3725	6.6229	141.3641*	-18.03002*
NBP	-1.260473	11.12095	747.1521*	-13.7522*	HBL	-1.2601	11.8496	874.8940*	-15.0500*
UBL	-0.039292	2.531193	2.334877	-14.5948*	MGCL	-8.7403	114.123	130757.8*	-13.8483*
EC	0.27347	3.111065	3.218608	-12.6299*	MLCF	0.5801	6.9346	173.8759*	-17.0440*
DGKC	-0.10744	2.166987	7.64755**	-13.1086*	NRL	0.174	2.6543	2.4861	-11.9650*
PTCL	0.1528	3.076405	1.025373	-13.1244*	BAHL	5.3597	61.7473	36850.25*	-17.0949*
BAF	0.291715	3.302951	4.465763	-14.9085*	ACBL	-0.8461	8.8369	381.6455*	-15.3538*
FFBQ	-0.320218	5.128466	51.0521*	-17.7165*	KTM	0.6371	4.6822	46.0182*	-17.3644*
LUCK	-0.104442	2.391584	4.275965	-13.6604*	KAPC	0.0568	4.1279	13.2787*	-15.4637*
NM	-0.145648	2.051902	10.16534*	-14.7131*	TEL	0.1584	12.9416	1022.3390	-18.3480*
AJI	-0.216157	2.267449	7.47644**	-12.8236*	NCL	0.11090	2.86462	0.697779	-14.86816*
FFC	-2.892661	25.4679	5562.188*	-13.9002*					
AN	-0.247365	2.694462	3.493817	-11.9587*					

Note. This Table presents Descriptive statistics for SSFs and Non-SSFs in Panel A & B. Skewness (Sk), Kurtosis (KT), Jarque – Berra (JB) and Augmented Dicky Fuller (ADF) test are presented in this Table.

Table 2A
Degree of Market Efficiency for SSFs and Non-SSFs

	Degree of Market Efficiency				Degree of Market Efficiency		
SCRIP	BEFORE	AFTER	INC/(DEC)	SCRIP	BEFORE	AFTER	INC/(DEC)
OGDC	1.875	1.896	0.02137	ABL	1.893	1.961	0.06759
MCB	1.895	1.925	0.02974	APL	1.99	1.948	-0.04216
PPL	1.932	1.912	-0.01963	ARL	1.855	1.89	0.03488
HUBCO	1.914	1.952	0.03755	DHC	1.899	1.746	-0.1433
PSO	1.904	1.904	-0.00004	EFU	1.895	1.931	0.03541
POL	1.845	1.912	0.06758	FCCL	1.965	1.943	-0.02263
NBP	1.836	1.883	0.04618	HBL	1.895	1.935	0.04069
UBL	1.93	1.906	-0.02462	MGCL	1.794	1.821	0.0266
EC	1.753	1.943	0.1897	MLCF	1.922	1.945	0.02328
DGKC	1.901	1.897	-0.00373	NRL	1.879	1.924	0.04513
PTCL	1.935	1.875	-0.06037	BAHL	1.932	1.899	-0.03362
BAF	1.927	1.962	0.03501	ACBL	1.979	1.872	-0.10692
FFBQ	1.983	1.907	-0.07538	KTM	1.954	1.955	-0.00131
LUCK	1.887	1.886	-0.00009	KAPC	1.901	1.853	-0.04759
NM	1.906	1.847	-0.0592	TELE	1.966	1.966	-0.11264
AJI	1.903	1.962	0.05973	NCL	1.936	1.875	-0.06101
FFC	1.939	1.968	0.02926				
AN	1.745	1.903	0.1575				

Note. This table presents the Degree of Market Efficiency for both SSFs and Non-SSFs. The Panel A & B present DME for before and after the event date, while depicting the change in the form of increase/decrease.

Table 2B
Paired Sample T Test for Pre to Post Degree of Market Efficiency Change

Category	Exact Significance (two-tailed)
SSFS	2.1098
Non-SSFS	2.1314

Table 3
ARIMA-EGARCH MODEL FOR SSFs

	OGDC	MCB	PPL	HUBCO	PSO	POL	NBP	UBL	EC
AR		0.114533(1)**	0.771633(1)*	-0.16435(3)**	0.016453(19)	0.72499(28)*	0.04636(1)	-0.15168(14)*	0.13325(1)**
				-0.02455(17)				0.100435	0.137716(10)**
				0.11032(18)**					-0.11064(17)**
									-0.13792(29)*
MA	0.172821(1)*		-0.78882(1)*			-0.67475(28)*			
	-0.13649(23)**								
Ω	-6.99E-01	-0.01194	-0.26025	-1.26582	-0.67348	0.226795**	-0.10636*	-0.06303	-2.63649***
B	0.1277	-0.0443	0.165277***	0.29373**	0.208451**	-0.05629*	-0.02538**	-0.02402	0.49329*
A	0.011194	0.031145	0.106754**	0.067343	-0.00564	0.949092	0.056622**	0.06523	0.073967
Γ	0.939111*	0.995391*	0.985529*	0.893942*	0.946693*	1.000605*	0.986445*	0.991525*	0.76614*
Dum	0.025405	0.002263	-0.00807	0.020609	0.009692	0.002856	0.00154	0.006801	0.148475
Dist	Normal	Normal	GED	GED	Normal	Normal	GED	Normal	Normal
	DGKC	PTCL	BAF	FFBQ	LUCK	NM	AJI	FFC	AN
AR		0.092912(1)	0.096685(22***)	-0.59651***	0.121457(1)**	0.158186(7)**		0.013708(1)	0.129226***
		-0.15015(3)**				-0.12732(26)***		-0.13623(4)*	
		0.214805(7)*						-0.04334(5)	
								-0.07525(8)	
MA	0.189049(1)*		-0.20844(9)*	0.528285			0.238619(1)*		
			-0.09569(18)***				-0.1125(21)**		
							-0.18849(23)*		
Ω	-0.12875	-0.23007*	-0.06454	-0.24189	0.038815	-0.74745	-4.69854	-1.07655***	-3.33112
B	-0.05236	-0.11272*	-0.03289	0.081865	-0.00629	0.153171	0.339896	0.202964	0.335041
A	-0.03981	0.096733**	0.101677*	0.17267*	0.04361	0.024043	-0.04209	0.212384**	-0.0644
Γ	0.98224*	0.966118*	0.991345*	0.980359*	1.003706*	0.929444*	0.508973	0.911948*	0.66189
Dum	0.026055	0.020546*	0.013844	0.008368	-0.01344	-0.00454	0.370167	0.122625	0.302411
Dist	Normal	Normal	Normal	GED	Normal	Students' t	Students' t	GED	Normal

Note. This Table presents the results of ARIMA – GARCH model for SSFs only. The underlying error distributions are Normal, student's t and GED.

Table 4
ARIMA-EGARCH MODEL FOR Non-SSFs

	ABL	APL	ARL	BAHL	EFU	FCCL	HBL	MGCL
AR	-0.0632(14)			-0.0700(6)**	0.2013(1)*	-0.2104(1)*	0.1279(1)**	0.6113(1)*
	-0.1250(20)			0.0678(11)**	-0.1280(4)***	-0.1635(2)*		
				-0.0903(13)*		0.1442(15)*		
				-0.0606(14)***		-0.1237(23)*		
MA		-0.0698(1)***	0.1985(1)**		-0.2488(16)*			-0.2698(1)**
Ω	-0.7001***	-1.2032***	-5.6394	-6.3755*	-0.2913***	-15.7605*	-10.5293*	-5.347318
B	0.2840**	0.3384*	0.4101	0.8527*	0.0356	-0.1646	0.5537*	0.2483
A	0.0559	-0.0017	0.0442	-0.2765**	0.0569	-0.0266	0.1391	-0.0171
Γ	0.9496*	0.8965*	0.4026	0.3854**	0.9685*	-0.7289***	-0.1061	0.3763
Dum	-0.0082	0.1018	0.2325	-0.1402	-0.0092	1.4878**	0.5312	0.0425
Dist	Normal	GED	Students' t	GED	Normal	GED	GED	GED
	MLCF	NRL	DHC	ACBL	KTM	KAPC	TELE	NCL
AR		0.1110(1)	0.1179(1)**	-0.1082(4)		0.0847(10)**		-0.09129(21)
		-0.1826(2)**		0.0012(22)				-0.08523(25)
		0.0597(13)						
		0.1623(24)*						
MA	0.0551(1)				-0.0784(30)		-0.2174(1)*	
							-0.0104(26)	
Ω	-0.324	-1.4296	-1.3300*	-0.5298***	-1.73861**	-3.3499	-0.7355**	-1.801833
B	0.0453	0.2355***	0.5368*	0.1953***	0.284487***	0.4781***	0.3112**	0.330684**
A	0.0692	0.0112	0.1162	0.1294**	0.225197**	-0.0466	0.1346	-0.03184
Γ	0.9684*	0.8708*	0.8980*	0.9608*	0.808448*	0.7008*	0.9337*	0.811708*
Dum	0.0333	0.0584	-0.0598	0.0056	0.049501	0.0772	0.0482	0.015306
Dist	GED	Normal	Normal	GED	GED	GED	GE	Normal

Note. This Table presents the results of ARIMA – GARCH model for Non-SSFs only. The underlying error distributions are Normal, student's t and GED.

Table 5
Simultaneously Increasing and Decreasing Volatility and DME

VOL & DME	SSFs (No.)	NON-SSFs (No.)
Increased	10	6
Decreased	3	2
Opposite	5	8
Total	18	16

Note. This Table presents number of stocks with simultaneous changes in volatility and DME changes.

Table 6
Comparison of simultaneously increasing and decreasing Volatility and DME

		Category	N	Observed	Test Prop.	Exact Sig. (2-tailed)
SSFs	Group 1	1.00	10	.77	.50	.092*
	Group 2	0.00	3	.23		
	Total		13	1.00		
NONSSFs	Group 1	1.00	6	.75	.50	.289
	Group 2	0.00	2	.25		
	Total		8	1.00		

Note. This Table shows results of Z test. Z test is used to check that whether proportion of simultaneously DME and volatility is different from simultaneously decreasing DME and volatility

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TESTING GDP FOR THE MODERATING EFFECT IN THE RELATIONSHIP OF FIRM CHARACTERISTICS AND RISK DISCLOSURE QUALITY IN THE BANKING SECTOR OF PAKISTAN

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Abstract

The study spotlight and investigate the moderating role of gross domestic product (GDP) in the relationship of firm's characteristics and risk disclosure quality. We use firm's characteristics based on the firm size, firm leverage, profitability and book to market ratio, whereas risk disclosure quality is analyzed on the bases of risk disclosure index created. We collected data of 25 banks through random sampling techniques for the period 2010-2016. We predict final results on the bases of Correlation and simple Ordinary least Square. The results demonstrate that the firm size, profitability and book-to-market ratio has positive significant impact on the Risk Disclosure Quality while leverage showing negative significant impact on the Risk Disclosure Quality. The results confirm and validate the moderating role of gross domestic product in the relationship of firm's characteristics and risk disclosure quality. This study will help the decision makers and top management in the banking sector.

Keywords: Firm Characteristics, Risk Disclosure, GDP, Correlation.

JEL Classification: G210

Introduction

Risk disclosure provides information to the user to enable them to assess the risk that affect the company's future performance and cash flows (Dobler, 2005). Ensuring the practices of transparent financial reporting system and to improve the risk disclosure quality among the principles of corporate governance. The disclosure of risks is significant for the company and the stockholders. As it better deal with knowing about the

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uncertainties of the business of the companies that provide help them in their decision making in the prediction the volume and timing of the company future cash flows in an appropriate manner. The investor needs to understand the risk facing by the companies and has been measured by the company to eliminate the risk. The debate over risk disclosure has received a lot more attention and now there is a need for knowing how to formulate and implement risk disclosure mechanism. Risk disclosure means to provide transparent information to investors and other stakeholders with a view to ascertain their trust and build the firm's reputation, which causes an improved outfit for the firm in the market (Conti & Maur, 2008).

Marugesu and Santhaparing (2010) increasing analyzed various firms for the purpose of understanding the relationship between firm characteristics and RDQ and argued that well co-ordinated and effective risk management and disclosure help in increasing the shareholder's wealth and the overall profitability of the firm. The study evidenced and recommended the effective risk management and disclosure mechanism. Ismail and Rehman (2011) conducted a study in the same line and found that managers hold some specific percentage of shares with a view to sort out the issue of agency problem, make the system transparent and make ways for the way forward. Risk disclosure plays a central role in corporate governance that is providing transparent information about risk disclosure which is considered as the vital element of corporate financial reporting. Transparency is very much important for the corporate efficiency and practices of investment (Abraham & Cox, 2007). Corporate disclosure helps to attain the efficiency of a firm and helps to build the investors' confidence and trust (Deumes, 2008).

Risk disclosure carries numerous benefits to shareholders, investors and stakeholder in general and enhances the financial position and reputation of the firm specifically (Allegrini, 2012). The risk disclosure is highly demanded by investors as it helps in building their trust and helps them in their investment decisions which help in their financial uplift (Beretta & Bozzolan, 2004). Risk disclosure can be vital for both informed and uninformed investors and make them confident and aggressive regarding their investment (Poskitt, 2005).

Risk has been increased, since the global financial crises and uncertainties emerged during 2007-2010 which badly affected the financial structure of many firms in general and financial institutions in particular (Ismail & Rehman, 2011). After the demise of well known international firms during the crises in 2007, the companies realized to provide a clear picture of information disclosure in order to build the trust of the investors and encourage them towards investment.

The repeated occurrence of financial crises and scandals not only have de-motivated and discouraged the investors and stakeholders but also negatively impacted the investor and stakeholder trust. Recently the institutes of different countries including Pakistan Chartered Accountants made a call to companies to provide information regarding operational risk and financial risk in their corporate reports. Therefore, the corporate governers reforms, in many countries are formulated including

Pakistan, mainly due to the collapse financial scandals. They incorporated and formulated new rules, regulations and laws, the guidelines for financial reporting standards and stock exchange to better deal with such kind of uncertainties and to comprehend better mechanism for risk management and disclosure. Reporting corporate risk is a source of communicating risk for the firm and it contains a lot of benefits for the corporate shareholders and investors. Corporate risk disclosure helps the firm in many ways, especially in the decision making of the firm.

Today, the investors not only know the true financial position of the companies but are also interested in knowing the various risks that companies are facing and are the main concern for these investors. Besides, they also want to know those strategies and framework adopted by companies for management and minimizing these risks. This is mainly because these investors would like to ensure that their investments are safeguarded and properly managed by the professional managers through established financial planning.

Investors prefer investing in those firms, which are having more exposure to risk, as full symmetry can help them in their decisions. Moreover, risk disclosure helps to motivate investors which help in improving the investors trust, thereby enhances the firm's profitability and size of the firm (Linsly & Shrivs, 2006). They also demonstrate that firm size and profitability play a vital role in risk disclosure, as more profitable firms are more disclosure driven. Consistent to the previous researchers, Zadeh (2012) also argued that corporate disclosure is vital to add value to the firm and ensure motivation of the investors. Financial risk disclosure is not the primary subject of interest that provide information, but operating and strategic risk disclosure is also essential and can affect the financial performance of a firm (Marzouk, 2013).

In Pakistan, very rarely researchers investigated the area of risk disclosure and none of the study has used the moderating role of GDP. Hence, this study is considered to be unique in this regard. Moreover, this study uses the most recent data of the banking sector in Pakistan for investigating the relationship of the variables of interest of this study.

Problem Statement

Due to the financial crises, since last fifteen years in the financial sector, the world has significantly highlighted the issue of corporate information disclosure and the risk disclosure. The quality of risk disclosure in Pakistani firms have remained a challenge to the researchers. Do Pakistani firms have risk disclosure practices and how the firm's characteristics impact the RDQ and what is the effect of GDP in their relationship? It is a concern for the researchers and policy makers. To answer this question, this study has been conducted.

Objectives of the Study:

This research is based on the following objectives.

1. To investigate and examine the impact of firm's characteristics on the risk disclosure quality of different banks in banking industry.
2. To investigate the moderating effect of GDP in the relationship of firm characteristics and risk disclosure quality in these selected banks.

Literature Review

Risk Disclosure is the communication of data related to firm's strategies, assets, operations and their factors to affect the outcomes. In prior studies, it has been observed that risk disclosure is affected by the size of the firm, leverage of the firm and financial position of the firm. The previous studies evidenced different results in this regard.

Zadeh (2012) analyzed 100 companies of Malaysian Stock exchange and investigated the impact of firm characteristics on the risk disclosure of a firm. The results evidenced a positive relationship between the size and the risk disclosure. The study also evidenced a significant relationship between book to market ratio and risk disclosure quality and confirmed the significance of risk disclosure to the financial health of the firms. In similar studies, some other researchers, however reported a negative relationship for the relationship of the similar variables, but many other predicted a positive relationship between these variables.

Perigon and smith (2010) asserted and found that risk disclosure is immense important to quantify for the efficiency. The study analyzed the relationship of firm characteristics with RDQ and they argued that firm profitability and efficiency is enhanced with more risk disclosure practices. They evidenced that firm size is positively correlated with the RDQ, suggesting that firms bigger in size usually are more disclosure friendly and like to disclose all the related things with risk. They also predicted that firm profitability is very much dependent on the firm's risk disclosure quality. The more a firm discloses its risk related information to shareholders, stakeholders and investors the more the firm has the chances to earn. Amran et al. (2008) analyzed that risk management disclosure is very vital for the attraction of investors and developing their trust and confidence. The study confirmed that Malaysian firms are below par than UK firms and predicted and confirmed that UK firms are more liked by the investors due to their more risk disclosure and prominent stance in this regard (Linsley & shrives ,2006). However, the findings of the study augmented that size of the firm is a key determinant which is positively associated with RDQ. The results are consistent and in line with the findings of many previous studies.

Elizhar and Husainey (2012) focused in the narrative of risk disclosure and analyzed a huge sample of non-financial listed companies. The analysis based on content analysis predicted that the

size of a company has positive linkage with firm risk disclosure quality and asserted that book to market ratio can also positively affect the RDQ. Linsley and Shrides (2006) also analyzed various firms of different sectors for knowing the relationship between characteristics of firm and RDQ and found insignificant positive results for most of the firm characteristics and firm risk disclosure quality. They also found a positive linkage for the corporate risk reporting and the level of environmental risk and profitability; however, the study evidenced insignificant relationship between the firm risk disclosure and firm level of leverage. Consistent to the findings of previous researchers, Dunne et al. (2004) also confirmed that firm size can be vital in disclosing the risk as it positively affect the RDQ, signifying that as the firm enhances in volume will affect RDQ and confirmed that the same is negatively correlated with leverage, meaning that firms having more leverage will not be risk disclosure driven.

Abraham and Cox (2007) confirmed the positive association between firm profitability and RDQ and also predicted positive relationship for book to market ratio and size with the risk disclosure quality of firms. Ismail and Rehman (2011) also evidenced that risk disclosure is vital for the investors trust and reputation of the firm and argued that firm leverage is negatively associated with firm risk disclosure and found positive association for RDQ and profitability. Similarly, Ali and Hassan (2011) investigated the linkage between the characteristics of a firm and its RDQ. They measure the quality of risk disclosure consisting of 24 point based on four criteria: Relevance, understandability, comparability, and verifiability and the Result revealed that the size, leverage level and profitability ratios are vital element affecting the risk disclosure. The study also found that all other factor (profitability, book to market value, and audit firm size) does not drive in RDQ in Egyptian context. Risk disclosure is vitally important for encouraging firm's profitability and book to market share and also evidenced that as firm size increases than risk disclosure practices are more exposed and help building investors trust and confidence (Semper & Beltran, 2009).

In similar studies, Deumes (2008) analyzed Dutch firms on the basis of content analysis to find that how the Dutch firms inform their investors about its prevailing risk. The study signified that information to investors would have positive effect on the stock volatility and investors will courageously invest in those firms disclosing their risk more aggressively. Ali and Taylor (2014) analyzed firms for knowing relationship between risk disclosure and firm characteristics and found that leverage effect the risk disclosure negatively, however firm size and profitability significantly explaining the risk disclosure quality. Consistent to the above researchers' findings, Abraham and Shrides (2014) also predicted that the size of the firm is a key predictor of risk disclosure quality which has positive linkage with RDQ; however they found insignificant relationship of book to market ratio and firm risk disclosure quality.

Keeping in view the salient findings in the literature, it is evidenced that different researchers have different viewpoints about the connection and linkage between firm characteristics and risk disclosure quality and more importantly to mention, that none of the study has been conducted, which used any moderator like GDP or information disclosure in the relationship of firm characteristics and risk disclosure quality.

Theoretical Framework

After reviewing of the relevant literature, the following theoretical framework has been developed, which fulfill the gap in the existing literature.

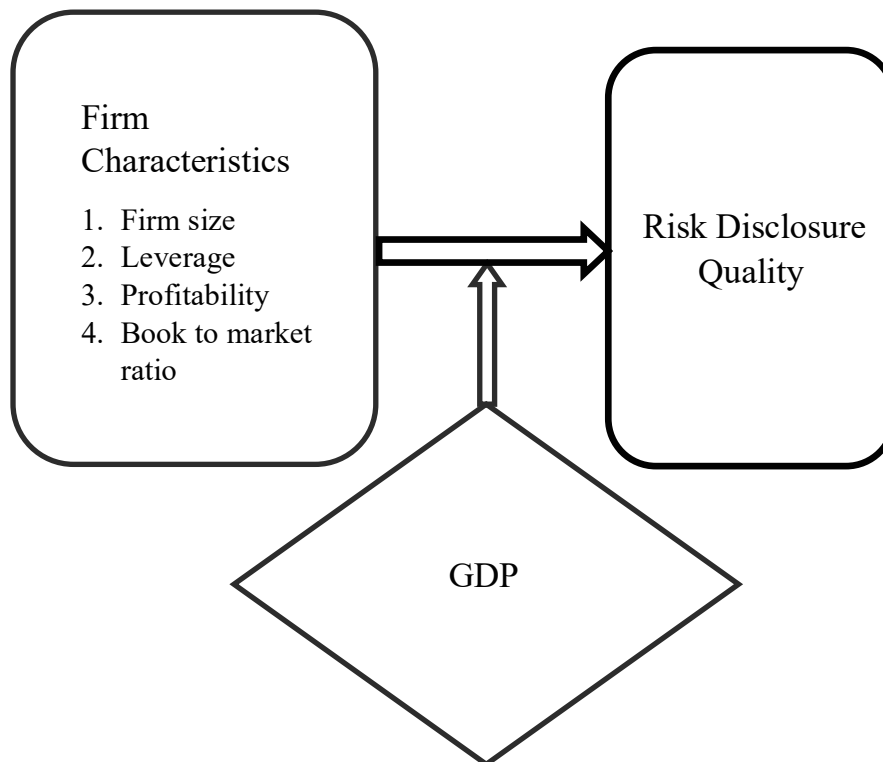


Figure 1

Research Hypothesis

- H1:* Firm's size has positive significant impact on the Risk disclosure.
- H2:* GDP has significant moderating effect in the relationship of Firm's size and Risk disclosure quality.
- H3:* Firm's Leverage has negative significant impact on the Risk disclosure.
- H4:* GDP has significant moderating effect in the relationship of leverage and Risk disclosure quality.
- H5:* Firm's profitability has positive significant impact on the Risk disclosure.
- H6:* GDP has significant moderating effect in the relationship of profitability and Risk disclosure quality.

H7: Firm's Book to market value has positive significant impact on the Risk disclosure quality.

H8: GDP has significant moderating effect in the relationship of firm's book to market value and Risk disclosure quality.

Operational Definitions and Measurement

Following are the measurements and operational definitions of the variables of this study:

Dependent Variable

The following dependent variable is used in this study.

Risk Disclosure Quality

We use a disclosure index to evaluate the risk disclosure quality of different banks. A check list of 24 items has been used by assigning 1 if item is disclosed and 0 otherwise. The total items disclosed have been summed up and divided by the total items of check list. Many previous researchers have also measured, RDQ through creating risk disclosure index (Deumes, 2009; Hassan, 2011).

Independent Variables

The following independent variables have been used in this study.

Firm Size

In this study firm size is measured, as the natural log of the total assets of a firm in a year. It has been measured in the same way by many previous researchers (Hassan, 2011).

Firm Leverage

The leverage represents the firm's borrowing for the use of business. In this study leverage is measured as the ratio of total debts to equity. Like, Gentry and Shen (2010) measured, similarly the firm leverage.

Firm Profitability

Firm's profitability is measured, as the net income/ total assets. It has been similarly measured by previous researchers (Helbok & Wagner, 2006; Gentry & Shen, 2010).

Book to Market Ratio

Book to market value predicts the growth of a firm. In this study, it is measured as the Book value divided by market value of the share at the end of each period. It has been widely used in similar studies by researchers (Gentry & Shen, 2010).

7.3 Moderating Variable

The study is based on the GDP as moderating variable, and has operationalized as follow.

Gross Domestic Product

It represents the total gross domestic product and has been measured as the annual GDP of the country over the period of this study. It has not been used in previous studies but a few studies identified it as moderator in their future directions.

Research Methodology

Type of Research and Techniques

This is a quantitative research and correlational study. The data has been quantitatively quantified. The data is analyzed through statistical techniques i.e correlation and regression. The moderating effect has been investigated through the interaction of independent and moderating variable.

Population and Sampling

The population represents the total number of observations available for the research or investigation. The population of this study is the total number of banks listed on Pakistan stock exchange in banking sector. Various sampling techniques are available to the researchers while conducting their studies. The study undertakes random sampling technique to conduct analysis of this study. The data of 25 banks have been included in the analysis of this study for the period 2011 to 2016.

Data Collection and Techniques

The data is collected form primary and secondary means for the researches. But for the analysis of the study. The data were collected from the annual reports of the banks, included in the data analysis of this study. However, some help in data collection has been taken from the state bank balance sheet analysis as well.

Results and Discussion

Diagnostic Testing and Specification of Model

Heteroskedasticity Test

To test the Heteroskedasticity in the data cook-Weisberg test was conducted. The results obtained p-value of 0.629 which is insignificant at 5% probability level, which documents that there is no heteroskedasticity in the data.

Wooldrige Test for Serial Correlation (Autocorrelation)

To test the serial correlation among the independent variable, wooldrige test has been applied. The reported results reveal insignificant level at 5% probability i.e prob > 0.05, reported value of 0.234, which signifies that independent variables are not serially correlated.

Model Specification Test

To test which model is supported by the data of this study. Langrange Multiplier test was conducted. The results generated insignificant results (prob > chi 2 = 0.213), which predicts that sample OLS is an appropriate model for the analysis of the data

Table 1
Correlation Analysis

Variable	RDQ	F.Size	Leverage	Profit	B-To-Market	GDP
RDQ	1.000					
F.Size	0.234	1.000				
Leverage	-0.213	0.014	1.000			
Profit	0.243	0.023	0.089	1.000		
B-to-market	0.210	0.0215	0.134	0.034	1.000	
GDP	0.203	0.135	0.173	0.051	0.133	1.000

The table 1 represents the correlation analysis of the variables of this study. Cohen (1988) stated that there are three levels of significance, starting from 0.1 to 0.29, 0.30 to 0.49 and 0.50 to 1. The correlation has been interpreted on these guidelines basis. The results show a positive significant correlation between RDQ and firm size, suggesting that as firm size increases its RDQ tends to

increase as the value of co-efficient of determination is significant as per the Cohen criteria. The results also report a positive significant correlation of RDQ with profitability, asserting that profitability of banking sector is enhanced due to the aggressive risk disclosure practices of these banks. The results also signify a positive association for book-to-market, and GDP, confirming that as the country's GDP increases then banks exhibit more disclosure practices. The co-efficient of determination value is significant for the relationship of GDP and RDQ. But leverage shows negative significant correlation with RDQ. It signifies that as the firm's leverage level increases than it show less driven towards risk disclosure.

Regression Analysis

The Firm Size and the Interaction of Firm Size and GDP on RDQ.

The results in table 2 show the impact of firm size as the characteristics of firm on RDQ and the effect of the interaction of firm size and GDP on RDQ. The results demonstrate a positive significant impact of firm size on RDQ of banks as the t-value is significant at 5% probability level. The reported beta in first model is 0.125. But when the GDP was multiplied with firm size, which is called the interaction term of firm size and GDP, it enhanced the beta value to 0.225 from 0.125.

Similarly, the R-square value has been reported as 0.316 in the first model, but due to the interaction of firm size and GDP, the same R-square value increases by 0.031 from 0.285 to 0.316. This signifies that that GDP works as a moderator due to the fact, that interaction term of independent and moderating variable increases the value of beta and R- square.

Table: 2

The firm size and the interaction of firm size and GDP on RDQ

Variables	Beta	ΔBeta	R.square	ΔR.square	T-value	P-value
Firm size	0.125		0.285		2.567	0.035
Firm size×GDP	0.225	0.100	0.316	0.031	3.456	0.001

Dependent Variable: RDQ

Leverage and Interaction of leverage and GDP on RDQ.

Table 3 shows the impact of leverage and the leverage with GDP on the RDQ of banks in Pakistan. The results suggest that leverage has negative significant impact on RDQ of banks. However, the impact of the interaction of leverage and GDP got savvier, as the value of both beta and R-square increased due to the interaction of GDP with leverage, this means that as the GDP of the country increase in term of output/value, it provides vibrant opportunities to the borrower to increase

the leverage which than definitely impact the RDQ of banks. Eventually it can be suggested from the results that GDP validate the moderating effect in the relationship of leverage and RDQ.

Table: 3

Leverage and Interaction of leverage and GDP on RDQ

Variable	Beta	ΔBeta	R ²	ΔR ²	T-value	P-value
Leverage	-0.120		0.220		-2.056	0.045
Leverage × GDP	-0.130	0.01	0.258	0.038	-2.871	0.005

Dependent Variable: RDQ

The Firm Profitability and the Interaction of Profitability and GDP on RDQ

The results in table 4 show the impact of profitability on RDQ and the effect of the interaction of profitability and GDP on RDQ. The results show that profitability significantly affects the RDQ i.e (t=2.32, p<0.05) of banks in Pakistan. The reported beta in first model is 0.113, while in second model showing the interaction is .213, documenting that the moderator has enhanced the relationship of independent and dependent variable. As the interaction term showing beta value of 0.213, which is bigger than the beta value of simple relationship between profitability and RDQ? Similarly, the R-Square value has been reported as 0.321 in the first model but the interaction of GDP has increased the multiplied effect of independent and moderating variable to 0.467. This demonstrates that GDP as a moderator strengthen the relationship of profitability and RDQ.

Table: 4

The firm profitability and the interaction of profitability and GDP on RDQ

Variables	Beta	ΔBeta	R.square	ΔR.square	T-value	P-value
Profitab	0.113		0.321		2.332	0.014
Profitab ×GDP	0.213	0.100	0.467	0.146	2.876	0.004

Dependent Variable: RDQ

The Firm Book to Market Ratio and the Interaction of Book to Market Ratio and GDP on RDQ

The results in table 5 indicate the impact of book to market ratio on RDQ and the effect of the interaction of book to market ratio and GDP on RDQ. The results predict that the ratio significantly affects the RDQ (t=2.356, p< 0.05) of banks in Pakistan. The reported beta in first model is 0.21, while in second model showing the interaction is 0.25, documenting that the moderator has enhanced the relationship of independent and dependent variable. Similarly, the R-Square value has been report-

ed as 0.361 in the first model but the interaction of GDP has increased the multiplied effect of independent and moderating variable to 0.481. This demonstrates that GDP works as moderator in the relationship of profitability and RDQ.

Table: 5

The firm book to market ratio and the interaction of book to market ratio and GDP on RDQ

Variables	Beta	ΔBeta	R.Square	ΔR.Square	T-value	P-value
B to mark	0.21		0.361		2.356	0.043
B to mark×GDP	0.25	0.04	0.481	0.120	3.567	0.006

Dependent Variable: RDQ

Discussion and Conclusion

The study was conducted with a view to investigate that how the GDP of a country moderates the relationship between the firm's characteristics and its risk disclosure quality. The firm's characteristics were based on the firm size, firm leverage, profitability and book to market ratio, whereas risk disclosure quality is analyzed on the bases of risk disclosure index created. To predict the moderating role, GDP has been used. The data has been collected on the bases of random sampling techniques using the data of 25 banks listed on Pakistan stock exchange. The data was collected for the period 2010 to 2016. The final results have been predicted on the bases of simple OLS. The results demonstrated that firm size has positive significant impact on the RDQ of banks in Pakistan, which means that as the size of the bank increases, it will exhibit more risk disclosure attributes. Hassan (2011) confirmed the findings of this study, who also predicted similar results in his study. However, in similar study Abraham et al.(2007) predict insignificant relationship between firm's size and risk disclosure quality. The results predict negative significant relationship between firm leverage and RDQ. Similar results have been documented by previous researchers, who conducted the same kind of studies and predict a negative relationship between firm leverage and risk disclosure (Hassan, 2011; Deumes, 2008). The results show a positive significant impact of firm profitability and book to market ratio on RDQ, which conform the findings of Hassan (2011), who predicts a strong positive association of profitability and book to market ratio with firm RDQ. The results confirmed a significant moderating effect of GDP in the relationship of firm's characteristics and its disclosure quality, which is an addition of this study in the existing literature. The study has some policy implications. This study will help the decision makers and top management of the banking sector to specially consider these key areas of their firms to tighten their polices and take remedial actions if they feel weaknesses in these areas for better outcomes.

Directions for Future Research Studies

Similar studies can be conducted, using audit standards as independent variable and some other forms of disclosure like information disclosure and corporate disclosure as dependent variables may be used in future studies. Moreover, along with moderating variable GDP another variable information disclosure can also be tested in similar studies in the relationship of firm characteristics and RDQ.

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A REVIEW OF LITERATURE ON EMOTIONAL INTELLIGENCE FOCUSING ON JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT

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Abstract

Emotional intelligence (EI) is the individual's capability through which a person identifies, manages and adapts emotions and labels them in an appropriate way, to achieve their goal (s). Social relationship among managers can be developed and maintained effectively within an organization using EI. This study reviews the literature of EI focusing on job satisfaction and organizational commitment. Searches were conducted using different queries for Google search engine and Google Scholar database to identify relevant research articles and grey literature on EI while covered period is from January 1990 to December 2018. The analysis indicated that high EI in people led to increased job performance, mental health and personal skills. This study further explored that EI improved job satisfaction of employees and enhanced organizational commitment. EI is an important construct for the growth of firms and individuals and can be studied in various fields such as business, engineering and healthcare. Future researches should be continued to explore the influence of EI on behaviour of employees not only with respect to Job satisfaction and organizational commitment but also with other aspects such as stress and turnover intention.

Keywords: Emotional Intelligence, Job Satisfaction, Organizational Commitment, Review of Literature.

JEL Classification: Z000

Introduction

Emotional Intelligence (EI) is the ability to identify and monitor one's emotions as well the emotions of others to achieve personal and professional endeavours (Mayer, Caruso, & Salovey, 2016). Researches defined EI as all psychological processes that involved processing the effective information (Zeidner, Matthews,

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& Roberts, 2004). EI had been defined with three distinct approaches. The first approach delineated by Bar-On (1997) with elaboration that aspect of performance not linked by EI. The second, developed by Goleman (1995, 1998), through competency models had approached EI and considered it as a tool for building relationship. The third approach, represented by Mayer, Caruso and Salovey (2016) illustrated that there exist relationship in between emotions and cognitions. It also elaborates present and future of the concept of EI as a mental ability. All relevant theories with EI lead to understand how people perceived and utilized EI to facilitate and support personal and organizational effectiveness (Ciarrochi, Alkhatib, & Caputi, 2000).

Since 1990s, Mayer, Caruso and Salovey (2016) had broadly written on the aspects of EI that it influenced leadership in the organizations and referred EI as a sort of conceptual inkblot, an unstructured notion that is open to a vast number of interpretations. According to Caruso (2004), EI helped people to process, comprehend and utilize emotional information for social relationships.

EI is vital for the working environment because an employee cannot detach one's feelings in the work place. Dong and Howard (2006) illustrated that an employee and his co-workers needed to attain necessary emotional skills to get success in the professional world. Kunnanatt, (2004) elaborated that EI can be used as a tool for handling emotions of employees in the work environment to attain effectiveness of employees and to create good working atmosphere within organizations. Kunnanatt (2004) further found that EI is the sum of total mental capabilities, which enabled individuals to understand one's emotions and the emotions of others in a correct way, achieving desired outcomes of the organization.

EI is a remedy for modern business and an important basic ingredient for the legal, medical, nursing and engineering practices (Boyatzis, 2007). In the corporate world, nowadays EI has been shown as the predictor of success and employee retention. According to Boyatzis (2007), when a multinational consulting firm collaborated with EI training program for employees' well-being, it added millions more into profits. For example, L'Oréal had 63% low employee turnover when management recruited employees based on their EI (Spencer, McClelland, & Kelner, 1997).

Working relations with supervisor made impact on work performance, job satisfaction and retention of employees (Goman, 1991; Graen & Uhl-Bien, 1995; Robbins, 2001). Managers with high EI were encouraging (Carmeli, 2003), and employees under them performed better and were more satisfied (Wong & Law, 2002). Huy (1999) elucidated that EI helped reduce employee turnover, create efficient working teams, and enhance creativity and transformational leadership. Bradberry (2003) explored that 60% of good job performance across companies had been explained by EI.

Interest in EI has increased greatly over the last decade. Although some researchers and practitioners have been quite optimistic about the importance of EI in organizations, critical questions remain about the concept, theory, and measurement of EI (Landy, 2005; Zeidner, Matthews, &

Roberts, 2002). Zeidner et al. (2004) explained that EI has been more focused towards anecdote, unpublished proprietary surveys, opinions of experts and case studies. Bar-On (1997) found the relationship between job satisfaction and scores of total EI after taking the sample size of 314 participants consisting of salespersons, college students, nurses and teachers, while focusing on the effects of EI on the individuals with respect to job satisfaction.

In this study, we reviewed the literature of EI focusing on job satisfaction and organizational commitment and this study demonstrates the concepts of EI, organizational commitment and job satisfaction in the practical field.

Methods

A literature review involves the identification, selection; critical analysis and written description of existing information (Polit & Beck, 2004). Suikkala and Leino-Kilpi (2001) and Evans (2002) inspired the method employed in this literature review. Articles and books were located using Google search engine and Google Scholar database covered period from January 1990 to December 2018. Publication in English language were considered only. The key words used were 'Emotional Intelligence', 'emotional intelligence and job satisfaction', 'emotional intelligence and organizational commitment', and 'reviews emotional intelligence'. In addition, the authors reviewed findings (Abraham, 2006; Boyatzis, 1999, 2007; Carmeli, 2003; Goleman, 1995, 1998; Jafri, Dem, & Choden, 2016; Mayer, Caruso, &, Salovey, 2016; Nikolaou & Tsaousis, 2002; Testa, 2001; Khalid et al., 2018) regarding specific EI skills found to be associated with success in the workplace.

Emotional Intelligence

Employees with higher level of EI were supposed to achieve better outcomes in business while their supervisors and management considered them as effective as well as efficient leaders (Jafri, Dem, & Choden, 2016). Previous researches stated that leaders with higher level of EI were effective leaders (Goleman, 1995; Stein, 2000). From a research over 500 organizations conducted by Hay Group showed that top leaders with outstanding performance had around 85% of EI (Zeidner et al., 2004). Sivanathan and Gekken (2002) derived relationship between the behaviours of transformational leadership and its capable aspects of EI, depending upon the emotional, social and personal skills of leaders with conceptual overlap (Bass & Avolio, 1994).

Mayer et al. (2001) explained three principles for EI to qualify as a genuine intelligence to human. First, any intelligence must not reflect preferred behaviour patterns as expected by management. Second, the proposed intelligence by management should show a distinction in established intelligence with description of relevant abilities. Third, intelligence should develop with growing age.

Boyatzis and Van Oosten (2003) stated that EI is composed of social and personal competence. Personal competence consisted of self-awareness cluster (recognizing emotions of people, self-awareness, accurate self-assessment, self-worth and sense of people's capabilities) and the self-management cluster (consistency with one's values, trustworthiness, integrity, adaptability, flexibility, emotional self-control and behaviour (Boyatzis & Van Oosten, 2003). They further elaborated that social competence consisted of organizational awareness cluster (empathy) and the relationship management cluster (teamwork, managerial conflicts and inspirational leadership change catalyst).

Emotional Intelligence in Workplace

Employee commitment, quality of service, customer loyalty, teamwork, development of talent and innovation were considered as wide array of work behaviours that are affected by EI (Zeidner et al., 2004). It has been found that with higher level of EI, people behaved efficiently, became more success oriented, career driven, enjoyed better health and relationship than those having low EI (Cooper, 1997). Since the development of the concept of EI, it had been accepted and adapted in the business world and later accepted in academics (Abraham, 2006).

Abraham (2006) associated EI with the satisfaction of personal life experience, leadership and success in work place. With the passage of time, the concept of EI gained popularity and had been accepted by several organizations on a large scale; however, there is still criticism on EI by some researchers. For example, Hutchinson et al. (2018) concluded that no scientific foundation had been found for the effectiveness of EI yet whereas leadership theories such as practical intelligence, EI and competencies had been accepted.

Emotional Intelligence Training effects on Performance of Employees

Nowadays, competencies for EI are going to be use in career selection and placement purposes and are gaining momentum in several organizations. With the passage of time, companies have realized that EI competencies were vital for the organizational management. (Zeidner et al., 2004). Companies have improved performances by measuring EI competencies such as empathy, assertiveness, emotional self-awareness and happiness, in recruitment and hiring procedure (Bar-On, 1997, Cherniss, 2001). For example, the U.S Air Force used the Bar-On EQ-i (Emotional Quotient Inventory) scores (Bar-On, 1997; Cherniss, 2001) and had savings of \$3 million per annum (around 3 times the previous savings) (Bar-On, 1997; Cherniss, 2001).

EI and Job Satisfaction

Job Satisfaction is termed as "from the estimation of one's job values, the pleasant emotional state is the job satisfaction (Schwepker, 2001)". Job Satisfaction also stated as "a positive or pleasurable

able state of emotion resulting from the satisfaction of a job or experience of the job” (Dong & Howard, 2006; Yao, Locke & Jamal, 2018). Job satisfaction is a variable that is very close to the organizational commitment (Lok & Crawford, 2001). Retention of talent had become an issue for organizations and retaining talented employees was the major concerns for human resource team (Nikolaou & Tsaousis, 2002).

Better understating with predictors of job satisfaction and job satisfaction itself can assist managers in communication with employees and can further facilitate for the organizational change (Dong & Howard, 2006). Long, Yaacob, and Chuen (2016) found and forecasted about the EI of employees that it was associated with performance and job satisfaction. Moreover, an employee who had high EI responded more quickly to the stress and bad behaviours of colleagues at workplace.

Leaders having high EI can use their abilities to better understand, perceive, and mediate effects that can affect the satisfaction of job negatively. Moreover, managers with high EI can increase job satisfaction by creating a supportive work environment for the employees (Long, Yaacob, & Chuen, 2016).

EI and Organizational Commitment

The concept of organizational commitment can be used for the identification of individuals and their participation in organizations (Mowday, Steers, & Porter, 1979). Commitment towards organization was highly related to the attendance, engagement and performance of the employees (Zhu et al., 2007).

Employee responsibility was the major measure for the success of manager and it reap advantages far more for the increased performance of organization (Mayfield & Mayfield, 2006). Managers with higher EI had positive interactions with employees and resulted in increased cooperation, coordination and citizenship of organizations, contributing to increased performances (Brush, Moch, & Pooyan, 1987; Wong & Law, 2002). Zhu et al. (2007) believed that employees with positive emotions had high affection for the company.

Organizational obligations are the willingness of employees to perform according to the objectives of organization, whereas, job satisfaction increase their commitment with the organization (Opkara, 2004). Cherian, Alkhatib, & Aggarwal. (2018) have found a strong relationship between organizational commitment and job satisfaction. Organizational commitment is actually an emotional reaction (Testa, 2001). Continuance commitment (CC), affective commitment (AC) and normative commitment (NC) are the three distinct constructs of the organizational commitment (Carmeli, 2003). Affective commitment showed a positive interrelation between individuals and the organization (Shahzad, Haris Qureshi, & Abbas, 2018). The affective component of organizational commitment refers to employees' emotional attachment to identification and involvement in the organization

(Allen & Meyer, 1990). Continuance organizational commitment explains fear of losing job benefits when in contact with risk adverse nature of employees that prohibited them for switching job (Feinstein, Vondrasek, & Restaurants, 2006). Lastly, normative commitment explains that employees with strong commitment would remain part of the organization (Meyer & Allen, 1991).

According to O'Boyle et al. (2011), a significant correlation existed among EI, organizational commitment and emotional coping ability whereas, EI acted as a slackening variable between organizational commitment and coping abilities. Nikolaou and Tsaousis (2002) explored the relationship between EI and occupational stress among samples of professionals in mental health institutions that showed a negative correlation between stress at work and EI. Employees with high scores of EI suffered low stress in the occupational environment. EI and organizational commitment had a positive correlation showing employees increased commitment with high level of EI. Nikolaou and Tsaousis (2002) further explained that emotionally competent employees were able to get more career opportunities.

Relationships between Job Satisfaction, Emotional Intelligence and Organizational Commitment

People, who are able to handle responses, directly influenced all the relevance of EI with job satisfaction, turnover intention and organizational commitment outcomes (Wong & Law, 2002). Job satisfaction of employees directly affected organizational outcomes. Recently there had been a new perspective about job satisfaction that drew attention towards the influence of two important variables, EI and trust on job satisfaction (Dong & Howard, 2006).

Trahant (2007) study showed that improved employee commitment and behaviours directly influenced the performance of an organization. Functions of an organization like production, recruitment, customer handling were affected by the EI that involved interaction with other people while the high EI level of management made good influence to the organization (Trahant, 2006).

According to Trahant (2006), an employee's relationship with their organization affected directly on organizational commitment and the job satisfaction as per effectiveness criteria. Management played a vital role in the development of organizational commitment and job satisfaction among employees. When managers were capable to possess EI, they had concerns for subordinates, and they could perceive the emotional status of the subordinates then they achieved the desire result satisfaction (Trahant, 2006). Trahant (2006) further elaborated that management level of EI played a vital role in prospering the follower organizational commitment and satisfaction with job .

Below we gave a few exemplary business cases on EI, job satisfaction and organizational commitment.

Hallmark Communication & a Multinational Consulting Firm

Sales staff of Hallmark Communication with 25% more EI than their counter sales staff found to be more productive. They executed better job performance with inner job satisfaction and more importantly, they focused on outcomes, strategic thinking and character building (Bradberry, 2003).

In addition, when a multinational consulting firm measured the senior partners on competency level of EI, they found that focusing on high EI generated \$1.2 million more profit. Boyatzis (1999) explained that powerful sales force working with high EI corporate partners showed a 139% gain in profit.

AT&T (American Telephone & Telegraph Company) & Coca Cola

AT & T participation in a cross industry study got the results that 20% more productivity achieved among all levels of management, that is, from supervisors to the senior level managers. For example, around 91 % of employees were top performers and they were with high EI (Bradberry, 2002).

Similarly, Coca Cola found that division leaders with higher level of EI had outperformed their targets by 15%, while counter division leaders missed the targets who had low level of EI (McClelland, 1999).

US Air force and L' Oreal

The US Air Force had succeeded in employee turnover rate from 35% per annum to the 5% per annum by selecting candidates with high EI. Total saving cost was \$3 million per year on an investment of \$10,000 for EI development programs with employees. After that, employees were highly committed with their organization (GAO Archive).

Based on EI skills, L' Oreal also reduced employee turnover rate, L' Oreal got \$91,370 profit per group of salespeople while this group had 63% less turnover as compared to the other group of sales staff which were not part of the EQ program (Cherniss, 2001).

Emotional Intelligence Business Case

There is a case study reviewed in The Emotional Intelligence Quick Book that analysed the emotional scores of people. After analysis the emotional scores, it found that directors and high-designated persons had low scores of EI (Simon & Schuster, 2005).

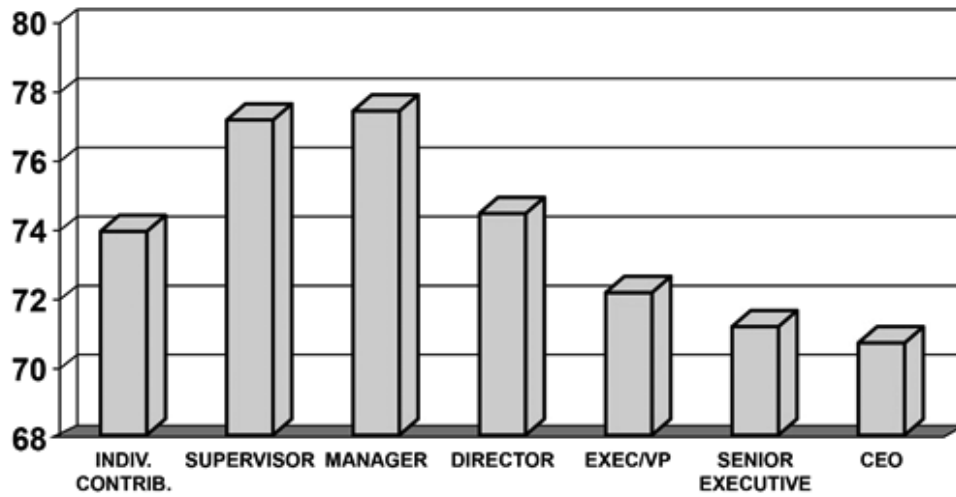


Figure 1

Traditional positions for individuals’ jobs like jobs in sales department, information technology and finance considered as “low EI jobs” while their employees of were insignificant in EI scores. Unemployed and engineering people were lower in EI while R&D positions, HR, Customer Service and business development were had highest EI (Simon & Schuster, 2005).

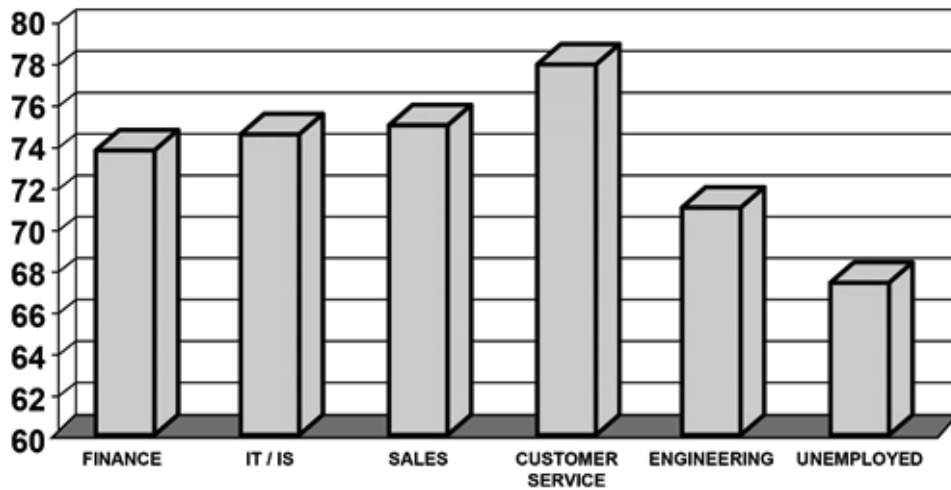


Figure 2

Findings & Discussion

Following four themes were emerged from the literature reviewed.

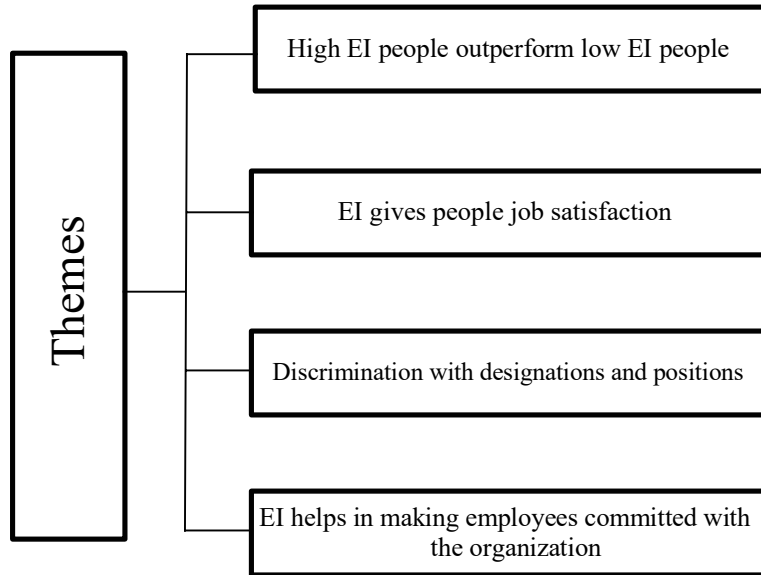


Figure 3

(1) EI gives people Job Satisfaction: People with emotional intelligence had the ability to produce different ways that gave them inner satisfaction with their jobs. Companies with such people got good profits in business. There was a need of training people with some aspects of EI on job satisfaction and productivity of employees. Such training help organizations in realizing the human capabilities and let them know the ways for improving those human capabilities by paying full attention to the psychological issues of employees (Hosseinian et al., 2008)

(2) High EI people outperform low EI people: Organizational Performance can achieve by recruiting emotional intelligent people. Studies revealed that people with high EI mostly outperformed the others that have low EI. The individuals, who had understanding and awareness of their own feelings, will have better relationships with their family members, colleagues, and management. Better relationships made them happy and gave inner satisfaction that ultimately reflected in their work and good job performances (Holt & Jones, 2005).

(3) EI helps in making employees committed with the organization: Organizations came in crisis when turnover was high but in such condition, management played a vital role in develop-

ment of organizational commitment with the subordinates. When managers were emotionally intelligent and took care of their subordinates then they could achieve the desired results with the help of their subordinates. It was the perception of employees that evolved their emotions and subsequently it brought a variation in their behaviours. If management became aware with emotions of subordinates then it could help in dealing subordinates for creation of a progressive work environment make people committed with organization (Khalid et al.,2018)

(4) Discrimination with designations and positions: Studies revealed that there always been requirement of people with higher EI on the positions where people coordination and interaction is must. People on high-level designations possess lower EI as compared to the people with higher EI on low-level designations because people interaction reduces with the increasing level of managerial hierarchy (Goman, 1991; Graen & Uhl-Bien, 1995; Robbins, 2001, Wong & Law, 2002).

Conclusion

Finding of this review stated that dealing with EI is really a responsible job and organizations that had taken this matter seriously are growing while the others are not. This study with opportunistic area for future research, used to explore the relationship of EI with Organizational Commitment and Job Satisfaction. Therefore, high EI can lead managers to produce positive work attitudes and selfless behaviours and as a result, employees under their supervision enjoyed good performance and job satisfaction. Management with EI increases the number of ways that increases the inner satisfaction in the employees and make them committed with the organization. The growth of firms, revenue and profits linked with the emotional intelligence. Profit generating organizations had high employee engagement and employee involvement. Best organizations were those which integrated employees in working with proper planning and its execution and then focused employees, teams, departments and units onto their performances and it happened time by time and not by the accident. Future researches should be continued to explore the influence of EI on behaviour of employees not only with respect to Job satisfaction and organizational commitment but also with all other aspects such as stress and turnover intention. The growth of firms, revenue and profits linked with EI and make understanding of EI is an important construct for the growth of firms and individuals and can be studied in various fields. This review will further help to refine the existing EI literature while containing significance on both practical and theoretical contributions.

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FACTORS AFFECTING ORGANIZATIONAL COMMITMENT AND ITS IMPACT ON CORE EMPLOYEES' INTENTION-TO-STAY: AN EMPIRICAL INVESTIGATION IN THE TEXTILE INDUSTRY OF LAHORE, PAKISTAN

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Abstract

This study is to investigate the effects of key human resource practices such as company culture and policies, remuneration and rewards, and Leadership on organizational commitment and its impact on core employees' intention-to-stay in textile companies of Pakistan. We collected the data from 301 core employees in the different textile companies in Lahore, Pakistan. To test the hypotheses we used path analysis. Results have shown a significant positive effect of leadership and HR practices on organizational commitment and its impact on core employees' intention-to-stay in the textile firms. This study will help the top-level management in the textile industry of Pakistan to find the effect of key HR and leadership practices on organizational commitment, and identify the effect of organizational commitment on core employees' intention-to-stay in the textile firms.

Keywords: Core Employees, HR Practices, Leadership Practices, Organizational Commitment, Intention-to-stay.

JEL Classification: L670

Introduction

The textile sector is the largest manufacturing sector in Pakistan. By tradition, after agriculture sector, it has been the only sector that has produced massive employment for both unskilled and skilled labour. The textile industry is the second largest employment generating industry in Pakistan. This industry adds 8.5% to the GDP and generates 15 million employment opportunities to the people

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of Pakistan (Ahmed, 2016). Pakistan is the 3rd largest producer of “cotton” with the third leading capacity of spinning in Asia after India and China, and adds 5% to the world capacity of spinning. Now, there are 442 spinning units, and 1,221 ginning units, and other 425 small units producing textile products (Memon, 2016). Punjab dominates in the textile industry in Pakistan. In 1999, textile exports were USD 5.2 billion and increased in 2009 to USD10.5 billion. During 2010 to 2011 textile exports were up to USD 10.62 billion. According to Memon (2016), Textile exports raised up to USD 13.74 billion during the fiscal year 2014-15. Although there are many successful firms in the textile sector of Pakistan, but they still face lots of troubles in human resource and leadership practices. In textile organizations, employees demand for better leadership and HR practices but due to the lack of the resources and right individuals, especially at the top-level management, hinders the textile firms to grow and implement the best HR practices. For the textile firms, it is very difficult to compete with competitors and retain experienced workers because there are no clear policies to hold them. The working life of most of the employees in the textile firms is very short. Most of the employees consider textile firm as a temporary place to work; therefore, they don't have any long-term plan to stay with the textile firm. Soliman et al. (1998) investigated that 67% of the research projects showed that employees did not get special training, Any kind of support from the owners or firms. From the literature review, this study found that there are numerous studies which investigated the employees intention-to-stay in the different firms (Eketu & Ogbu, 2015; Griffeth & Hom, 1988), but there are limited studies which examined HR practices (Agarwal & Swati, 2012; Chew, 2004), and OC (Chew, 2004; Dalessio et al., 1986; Mathieu & Zajac, 1990), and core employees' intention-to-stay (Chew, 2004) in the textile firms. Moreover, no study has yet investigated HR practices and leadership effect on organizational commitment (OC) and their impact on core employee's intention-to-stay in the context of Pakistan which is a main threat to the firm in Pakistan, especially in the textile industry where employee turnover is high. Almost all the firms in the world are trying various strategies to get higher output from workers. Retention of the core employees is one of the key aspects that could facilitate in getting the desired outcomes. This study is to investigate the leadership and key human resource practices 'effect on OC and its impact on core employees' intention-to-stay in the textile firms of Lahore, Pakistan, and to measure how intensely leadership and HR factors are affecting OC and core employees' intention-to-stay in the organization. The followings are the main concern of this research: RQ1: Does HR practices such as company culture and policies, remuneration and rewards, and leadership practices significantly influence OC in the context of textile industry of Lahore, Pakistan. RQ2: Does organizational commitment significantly influence core employee's intention-to-stay in the textile firms of Lahore, Pakistan.

Literature Review

Permanent employees are the core employees including the foundational and central groups that possess the skills necessary for the growth and survival of a firm. According to Business dictionary, Core employees are supported in their work by peripheral or contingent employees. Core employees are the individuals who perform multiple tasks and have an effect on other individuals

(Chew, 2004). Over the years, the OC concept has attracted significant concentration and has become fundamental objectives of HRM. According to Guest (1987), human resource practices are aimed to maximize employee commitment, organizational integration, quality and work's suppleness. Lee et al. (1992) demonstrated that organizational commitment consists of three components: a willingness to display effort on behalf of firms, a desire to belong to the firm, and identification with the company's values and goals.

Employee retention is positive for the firm as well as for the worker. A good firm should devise how to retain and attract new employees. Bryman (1992) defined leadership as "definite individual's behaviour that is found in non-coercive influence when that individual in cooperating and directing the behaviour of a team towards the achievement of the shared goals; that affects directly to hold permanent workers. Leaders are the individual appearance of the firms. The word "reward" is described as, something that the firm gives to the workers in the reaction of their performance and contributions, and also something which is preferred by the workers (Agarwal & Swati, 2012). Silbert (2005) studied that rewards are intrinsic or extrinsic such as "cash reward" such as bonuses or it can be an acknowledgment such as the best worker in the department, and tangible reward is the item that in which the firm awards the workers in response of their performance or contribution so that the staff's turnover can be reduced for future optimistic performance. Furnham (2002) explained that culture of the company is invisible philosophy, communication protocol, type, taboo and ritual of management to create the uniqueness of each organization. From the perspective of this study, commitment is described as loyalty and attachment (Alvi et al., 2014). This loyalty and attachment is displayed by the employees at different levels in their departments, jobs and organizations. HR and leadership practices increase internal capabilities of a company to deal with present or future challenges to be faced by a company. The organizational culture so created can facilitate to build a long-term and sustainable capability of the organization to cope with external challenges (Nikpour, 2017; O'Donnell & Boyle, 2008). Chew (2004) argued that the retention of the core employees' more if they get a high commitment from the human; with HR practices and the factors of the organization such as remuneration and rewards, and selection (organization-fit). Hai (2012), and Chew (2004) demonstrated that intention-to-stay of the core employees in the organization depend on the leadership behaviour, company culture and policies, and remuneration and rewards. Silbert (2005) demonstrated that rewards and compensations have a long-term effect on the workers and it consistently supports the employees' perception that they are valued. Mathieu and Zajac (1990), Griffeth and Hom, (1988), and Dalessio et al. (1986) empirical investigations strongly support the proposition that intention to leave or stay is consistently and strongly related to turnover voluntary.

Research Hypotheses

From the above literature review, this study proposed the following hypotheses:

H1a: Leadership has a positive effect on OC in the textile industry.

H1b: Remuneration and rewards have positive effect on OC in the textile industry.

H1c: Company culture and policies have a positive effect on OC in the textile industry.

H2: Organizational commitment has an effect on core employee's intention-to-stay in the textile industry.

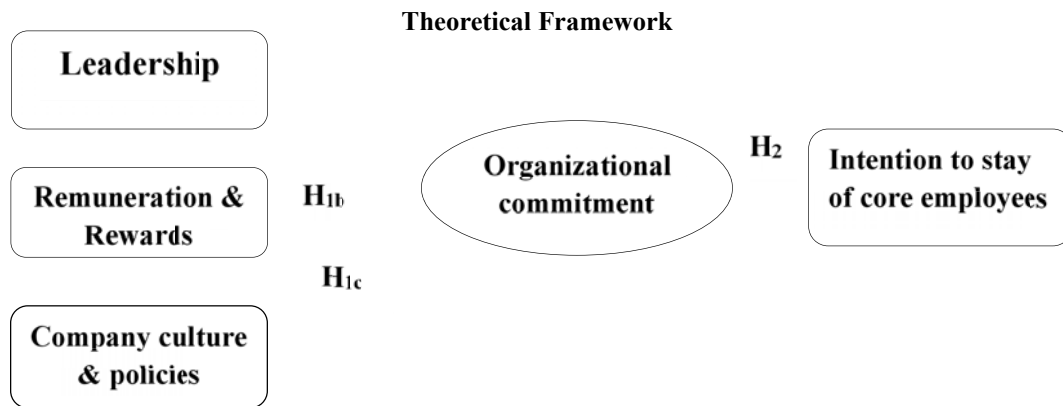


Figure 1: Theoretical frame work

Methodology

For this research, we collected the data from the permanent employees in the textile organization of Lahore, Pakistan who were conveniently available to participate in the study. We personally distributed 350 self-administered questionnaires copies to the respondents, 301 copies of the questionnaires were returned, we selected 277 copies of the questionnaires; 86% was the response rate. We excluded 24 copies of the questionnaires which had incomplete answers. The data compilation process lasted for two weeks. We used both secondary and primary data. The primary data was collected from respondents by using a questionnaire that was self-administered and secondary data was collected from different journals, websites, and books.

Measurement and Operational Definitions

The questionnaire items and operational definition for each of the research constructs is as follows:

- Leadership: Leadership is “individual’s behavior” that find in non-coercive influence when that individual in cooperating and directing the activities of a team towards the achievement of the common goal (Bryman, 1992). This study used 8-items questionnaire which was adopted from Hai (2012) and for each measure, a Likert response scale was used ranging from 1 to 5 with 1 indicating “strongly disagree” and 5 indicating “strongly agree.”
- Remuneration and Rewards: The role of HR in determining the level of benefits and salary for a

specific position of an employee in a company is an important factor in the engagement, retention, motivation and attraction of workers. The word “reward” is described as, something that the firm gives to the workers in reaction of their performance and contributions, and also something which is preferred by the workers (Agarwal & Swati, 2012). This concept is measured by 5-items questionnaire which have been adopted from Hai (2012) and each measured by using a 5-point-Likert scale.

- Company culture and policies: This concept is measured by 4 items which have been adapted from Kabanoff (1991), Morita et al. (1991), Chew (2004) and each was measured by using a.
- Organizational commitment: refers to the psychological attachment of an employee to the organization. This variable measures the feedback for the firm’s affection. This study adopted 9 items from Meyer and Allen (1997) and five-point scale of Likert was used for measuring each item.
- Intention to stay: Intention-to-stay measures the trend of leaving or staying of the firm’s workers. For measuring this, 4 questions have been adopted from Hai (2012). For each measure, a Likert-type response scale was used ranging from 1 to 5 with 1 “strongly disagree” and 5 “strongly agree”.

Data Analysis and Findings

The respondents were the core employees of the textile firms of Lahore, Pakistan. Figure 2, 3, 4 and 5 shows demographic information of the respondents. The study demographic variables are gender, age, working department, and education.

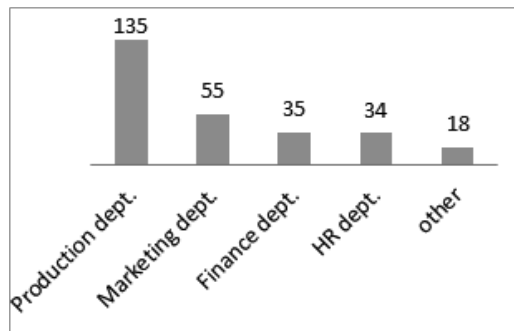


Figure 2: Working Department

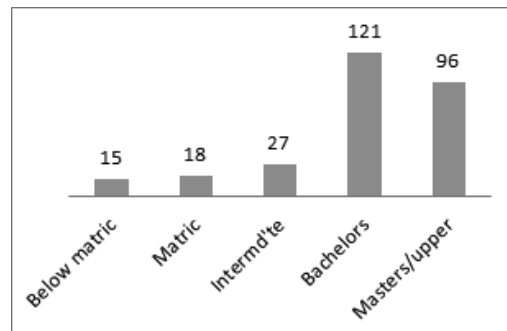


Figure 3: Education

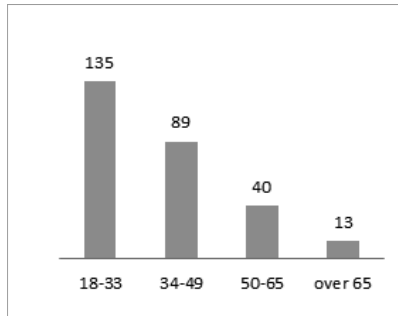


Figure 4: Age of the Respondents

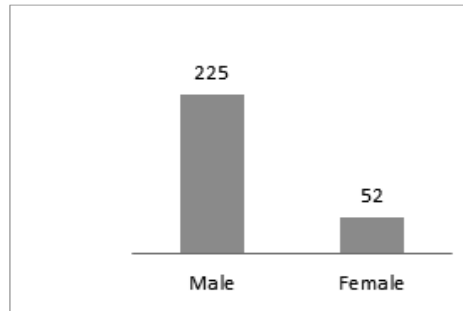


Figure 5: Gender

Correlation and Reliability Analysis

This study used the Pearson Correlation Technique through SPSS to investigate the strength of association between the constructs. From the results shown in Table 1, a positive relationship between leadership, company culture and policies, remuneration and rewards, and organizational commitment has been observed. The mean and standard deviation values are also satisfactory. Furthermore, Table 01 showed that Cronbach’s Alpha value of Leadership is 0.817 for 8 items, alpha value of remuneration and rewards is 0.896 for 5 items, company culture and policies is 0.786 for 4 items, intention to stay of core employees is 0.811 for 4 items and Cronbach's alpha value of organizational commitment is 0.874 for 9 items. All values were above 0.70, depicting acceptable internal consistency reliability.

Table 1
Reliability and Correlation between the Constructs

Reliability and Correlation between the Constructs					
Constructs	Leadership	Remuneration and rewards	Company culture and policies	Intention to stay	Organizational commitment
Leadership	1				
Remuneration and rewards	0.480**	1			
Company culture and policies	0.232**	0.353**	1		
Intention to stay	0.292**	0.362**	0.446**	1	
Organizational commitment	0.422**	0.403**	0.450**	0.618**	1
Mean	2.693	2.452	2.529	2.483	2.670
SD	0.985	1.028	1.038	0.971	0.908
Alpha	0.817	0.896	0.786	0.811	0.874

Note. At the 0.01 level (2-tailed) correlation is significant**

Measurement Model

We first performed CFA to assess the appropriateness of our measurement model. CFA relies on various statistical tests to validate the adequacy, fit-of-model to the research data. It is conducted to analyze how understandably and robustly hypothesis of the concern is confined. According to Arnold and Reynolds (2003), CFA improves the scale congenial measurement distinctiveness. According to Bernard (1998), the results of CFA are acceptable when the value is larger than 0.30. As a result; the items whose regression weights or factor loadings are less than 0.30 are rejected and further not included in the analysis. For instance, items like “This firm keeps workers well informed on matters significant to them ”is dropped in analysis due to less regression weights.

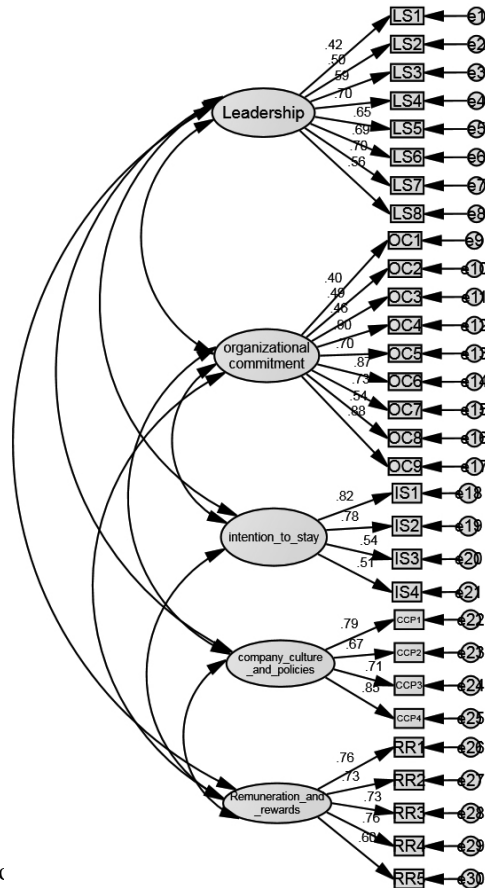


Figure 6: Measurement Model

Hypotheses Testing: SEM

The hypotheses were tested using SEM. In Figure 7, H1a is explaining that Leadership has positive effect on OC. It is confirmed from the findings that the path coefficient value $\beta= 0.269$ and $p \leq 0.001$. The findings are consistent with the results of Podsakoff, MacKenzie and Bommer (1996) and Loke (2001). H1b is explaining that remuneration and rewards has significant positive effect on OC. Results described that the path coefficient value $\beta=0.156$ and $p \leq 0.01$. The findings are supported with the results of Chew and Chan (2008). Figure 7 also depicted that H1c company culture and policies has positive effect on OC. It is confirmed from the findings that the path coefficient value $\beta= 0.332$ and $p \leq 0.001$. The findings are consistent with the results of Nikpour (2017) and Alvi et al. (2014). Figure 7 showed that H2 Organizational commitment has an effect on intention to stay of core employees. Results described that the path coefficient value is 0.618 and $p \leq 0.001$. The results are supported by the findings of Jyotsna (2007) Griffeth and Hom (1988) and Blau (1989).

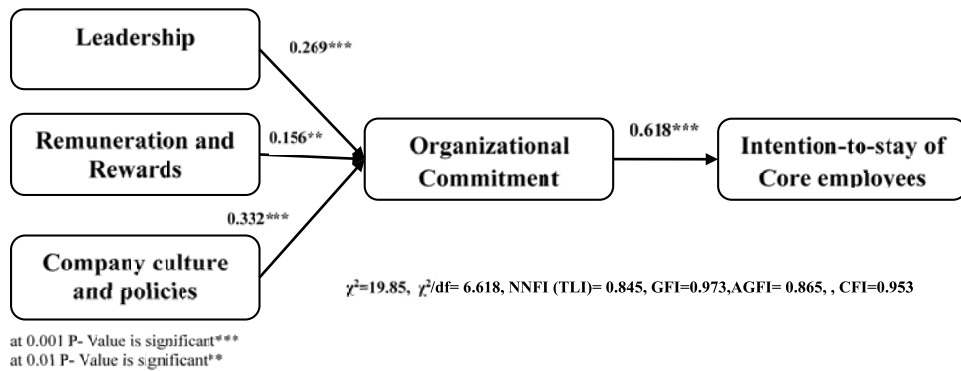


Figure 7: Model of Path analysis

Discussion and Conclusion

The objective of this study is to examine the effect of leadership and key HR practices on OC and its impact on core employees’ intention-to-stay in the textile industry of Lahore, Pakistan. This research has found that company culture and policies have a positive effect on OC, which helps the firms to retain the core employees. Good company culture and policies have given the reason to the core employees to stay (Chew, 2004). Moreover, the policies of the firm should update and revise occasionally; purpose of that action is to make the core workers recognize that organizations update or amend policies and they are taken care of by the firms. The organizational structure should be flexible and flat to adapt reaction of core worker is one of the important leadership and HR practices,

because if the structure is not flexible the policies will not support. Another advantage of good company policies is that it will support the firm structure and the firm structure will support back the policies. This study found that core employees consider the company culture and policies are the most significant factors in giving the reason to become more committed to stay in the textile organization; its factor path coefficient value $\beta=0.332$ and $p \leq 0.001$, which is the highest among other factors such as leadership which has $\beta=0.269$ and $p \leq 0.001$, and remuneration and rewards whose coefficient value of $\beta=0.156$ and $p \leq 0.01$. This study found that core employees consider the company culture and policies as one of key HR factors for giving the reason to stay in the textile organizations. The firms make sure that the overall remuneration and rewards or compensation package provided by the firms should be better than those of the competitors (Hai, 2012; Chew & Chen, 2008; Chew, 2004).

This study concluded that organizational commitment plays a big role in employee's programmed retention. Textile firms in Lahore, Pakistan should place more stress on employee retention than hiring new employees, since it is economical to hold existing employees than to bring in new ones (Merhar, 2016; Bryant & Allen, 2013). Textile firm's executives in Pakistan should significantly consider OC and HR factors such remuneration and rewards, company culture and policies, and leadership when focusing efforts or making plans on employee's retention. The results of this research will provide the support to the top-level managers to comprehend the efficiency of these factors for retaining core employees.

Limitations and Future Research Areas

First, from a theoretical perspective this research study could have been improved if we had integrated component variables (i.e., continuance, affective & normative commitment dimensions). But we made the selection considering the questionnaire length. Second, this research study was a cross sectional study, but to develop the fundamental paths of the researched variables a longitudinal research would have been more appropriate (Poon, 2004). Third, for data collection we have employed convenience sampling technique. So, our sample may not have been fully representative of the entire employee population in the textile organizations of Pakistan. It was unrealistic to use random sampling of any kind because of the unavailability of publicly available participants' pools or employee datasets.

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Questionnaire

Dear Respondent:
 Kindly follow the instruction.
 Instruction:
 Please answer Part 1 and Part 2.
 Please circle the number that best matches your opinion.
 Part 1:
 A. General Characteristics

1. Personal Information	I am working in the department	a) production	b) marketing	c) finance	d) HR	e) other
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1.	Gender	a) Male	b) Female			
2.	Age	a) 18-33	b) 34-49	c) 50-65	d) Over 65	
3.	Education Level	a) Below matric	b) matric	c) Intermd'te	d) Bachelors	e) Master/upper

Part 2:

Please answer each statement below by putting a circle around the number that best reflects your degree of agreement or disagreement with that statement.

1=SD-Strongly disagree, 2=D-disagree, 3=N-Neutral, 4=A-agree, 5=SA-Strongly agree

Sr.No.	Leadership	SD	D	N	A	SA
1.	The firm leadership practices are reliable with my personal values	1	2	3	4	5
2.	The leadership practices in this firm increase my satisfaction with my job.	1	2	3	4	5
3.	The leadership practices in this firm assist me to become a high performing worker.	1	2	3	4	5
4.	The firm's leadership practices make a positive input to the overall effectiveness of the firm.	1	2	3	4	5
5.	This firm keeps workers well informed on matters significant to them.	1	2	3	4	5
6.	Adequate effort is made to determine the thought and replies of people who work here.	1	2	3	4	5
7.	Communications across all levels in this firm tend to be excellent.	1	2	3	4	5
8.	Firm structure encourages Vertical and horizontal communication.	1	2	3	4	5
	Measurement of remuneration and rewards	SD	D	N	A	SA
9.	This firm pays well.	1	2	3	4	5
10.	Staffs are given positive recognition when they generate high-quality work.	1	2	3	4	5
11.	This firm offers an excellent benefits package then competitors.	1	2	3	4	5
12.	This firm values individual excellence over team-work	1	2	3	4	5
13.	This firm offers excellent opportunities for endorsement.	1	2	3	4	5
	Measurement of company culture and policies	SD	D	N	A	SA
14.	This firm has a defined mission/vision to achieve its goals.	1	2	3	4	5
15.	The firm structures make possible the way we do things.	1	2	3	4	5
16.	Development towards meeting planned objectives is periodically reviewed.	1	2	3	4	5
17.	Organizational procedures and policies are helpful, up to date and well understood.	1	2	3	4	5
	Measurement of organizational commitment	SD	D	N	A	SA
18.	I find it hard to agree with this firm's policies. (negative)	1	2	3	4	5
	I could just as well-working for a different firm if the kind of work was similar. (negative)	1	2	3	4	5
19.	There is little to be gained by staying with this firm indefinitely. (negative)	1	2	3	4	5
20.	I feel a strong sense of belonging to this firm.	1	2	3	4	5
21.	This firm really inspires the very best in me in the way of job-performance.	1	2	3	4	5
22.	This firm's values and my values are very similar.	1	2	3	4	5
23.	I am willing to put-in a great deal more effort than usually expected to assist this firm be successful.	1	2	3	4	5
24.	I feel proud to tell others that I am part of this firm.	1	2	3	4	5
25.	I truly care about the future of this firm.	1	2	3	4	5
	Measurement of intention to stay	SD	D	N	A	SA
25.	I will definitely look for a new job in the near future. (negative)	1	2	3	4	5
27.	I plan to work at my current job for as-long-as possible.	1	2	3	4	5
28.	I did not like to leave this job.	1	2	3	4	5
29.	I will definitely continue this job in the near future.	1	2	3	4	5

TOWARDS AN UNDERSTANDING OF PREFERENTIAL TREATMENT IN SERVICE ENCOUNTERS: EVIDENCE FROM BANKING SECTOR OF PAKISTAN

Moin Ahmad Moon¹, Muhammad Awas Khalid² and Hayat Mohammad Awan³

Abstract

The purpose of this study is to understand the relationships between perceived justice, customer satisfaction with service worker and customer satisfaction with the organization in a service encounter. We employed four texts based role-play scenarios [equity reward, under reward, over reward (unique) and over-reward (non-unique)] to obtain responses from 195 conveniently selected university students. Structural equation modeling (SEM) with maximum likelihood method was used for data analysis. The findings suggest that different settings for receiving preferential treatment (individually or shared with another customer) shaped dissimilar levels of customer satisfaction with a service worker and with a service organization. Customer satisfaction with service worker is a source of intensification in customer satisfaction with a service organization. In the end, future recommendations and managerial implications are also discussed.

Keywords: Preferential Treatment, Service Marketing, Perceived Justice, Customer Satisfaction.

JEL Classification: G210

Introduction

According to some service researchers, providing preferential treatment to their customers is beneficial for the service firms. Preferential treatment can be defined as a situation in which the focal/particular customer is receiving something “extra” as compared to other customers who don't

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receive something “extra” or don’t receive to some extent (Jiang et al., 2013). For instance, providing extra services to a few customers, prioritizing them in case of a queue, providing them with faster services or offering them better prices as compared to other customers may be considered as preferential treatment.

A positive relationship was found by Lacey (2007) between customer commitment, preferential treatment, and customer satisfaction with the organization or (the) brand, purchasing behavior of the customer (customer share & positive word of mouth). Therefore, we may assume that preferential treatment provides benefits to not only the customers but also the firms. A majority of previous studies claim that service encounters take place when other customers are absent. Whereas, in real service settings, most of the encounters take place when the other customers are present (Söderlund et al., 2014). Several services encounters held in the presence of other customers such as dining-in in a restaurant, having a facial treatment at a beauty parlor and making a bank transaction. In situations, such as these, customers are well aware of the happening (s) taking place around them as Söderlund (2014) suggests that the impression of the focal customer about the firm gets affected if other customers are also present even if they are strangers.

Human beings tend to compare themselves with others in every possible situation and they make inferences about situations and acts accordingly (Moon, Hassan & Attiq, 2015). Preferential treatment that involves several customers in social settings requires cautions as customers compare their treatment with that of other customers (Söderlund et al., 2014; Jiang et al., 2013). Customer to customer comparison can make preferential treatment more problematic as only the focal customer is getting the preferential treatment. Moreover, when focal customers receive preferential treatment, other customers may react negatively who do not receive something extra in the presence of focal customer (Jiang et al., 2013). Therefore, a deeper understanding of preferential treatment in customer-to-customer comparison is warranted (Moschis, 1976).

For service organizations, customers are the major stakeholders and the ultimate purpose of these organizations is to satisfy them. Two major players are involved in a service encounter with a customer, one is a service worker and the other is service organization with its service escape (Moon et al., 2017). A customer may be satisfied with service worker and organization at the same time and may be dissatisfied with one of these, while satisfied with the other. Consequently, we may cautiously assume that customer satisfaction with both the organization and worker is affected by preferential treatment when other customers are present. Therefore, in this research, we study customer satisfaction with service worker (CSSW) and with service organization (CSSO) in a situation where a customer receives something extra from a service worker or does not receive. We also studied the association between perceived justice, CSSW, and CSSO in a situation where preferential treatment received by the customer as compared to other customers who did not. This study focuses on the level of CSSW and CSSO whereas, past studies talk about the influence of preferential treatment on customer satisfaction only with no differentiation between CSSW and CSSO.

Literature Review

Perceived Justice (PJ)

The idea of PJ comes from the justice theory (Adams, 1963), which suggests that people compare their inputs and outputs in everyday exchanges to the inputs and outputs of others who are part of similar exchanges. PJ, a multi-dimensional concept consists of interactional, procedural and distributive justice (Nikbin et al., 2010). Perception of justice is one of the main outcomes of making the comparisons (Söderlund et al., 2014; Jung & Seock, 2017). People consciously or unconsciously tend to compare their outcomes with the outcomes of others (Pritchard, 1969). The sense of perceived justice emerges from equity theory in which interpersonal evaluations are the focal point.

As equity theory states human beings believe that the recipient's contribution in a given situation should derive the distribution of rewards and punishments (Adams, 1963; Konow, 2003, Chan & Lai 2017). Furthermore, Equity theory states that relative comparison—individuals' comparing themselves to others, is the result of perceived equity. This comparison leads to three potential outcomes. First, customer A will perceive the existence of justice if customer B's reward or input ratio is equal to the reward or input ratio of customer A, called Equity-Reward. Injustice will be considered, if A views the ratio as unequal to B. Injustice can be of two types 1) Over-Reward in which input/reward ratio of A is higher than input/reward ratio of B and 2) Under-Reward in which input/reward ratio of A is less than input/reward ratio of B. Therefore, according to justice theory, receiving more than others (over-reward) against the same input is a form of injustice (Söderlund et al., 2014; Gohary et al., 2016).

Let us imagine that in a service organization, a service worker provides services to several customers. We consider all customers as Bs and one focal customer as customer A, who receives preferential treatment. In this scenario, other customers (Bs) may compare themselves with focal customer A. Let's suppose that focal customer A is also comparing himself with a particular customer (B) that is identical to him. According to equity theory, we can identify three possible ways for customer A to make comparisons with customer B;

- (1) Equity-Reward: Neither A nor B will receive something extra.
- (2) Under-Reward: B receives an extra element/reward, of which A is deprived
- (3) Over-reward: A receives an extra element/reward, of which B is deprived.

There can also be a fourth possibility of preferential treatment if both A and B can obtain preferential treatment. This case of equity reward is a special case in accordance with traditional equity theory that focuses only on customer A vs. customer B comparison (Söderlund et al., 2014). But in this service encounter, A is also able to make comparisons with other people as it involves several customers other than A and B (Xia, Monroe, & Cox, 2004). The setting in which A and B are receiving preferential treatment, of which other customers are deprived, can be termed as over-reward for A. However, the key difference between the over-reward described in condition 3 and the over-reward described in

current condition is that the former is not unique. As an addition to equity theory, many firms provide an extra element to several customers, known as non-unique over-reward.

(4) Non-Unique Over-Reward: there is an extra element for both A and B.

Under this context, customer A may not receive extra in condition 1 and 2, whereas, in condition 3 and 4, customer A may receive extra element (Söderlund et al., 2014).

Customer Satisfaction (CS)

CS with a business can be explained as, (the) positive feelings/emotions regarding the value obtained after using a business service in a particular situation (Virmani & Dash, 2014). According to Szymanski and Henard (2001), a positive relationship between PJ and CS exists. We measured the CS in two ways: 1) CSSW and 2) CSSO.

Customer Satisfaction with Service Worker (CSSW)

The period during which a customer interacts directly with service is known as service encounter (Langeard, 1981). This definition encircles all elements of service firm with which a customer may interact including physical facilities, tangible elements and staff, during service encounter (Bitner, 1992). Service encounter is mainly determined by customer behavior towards service (Farrell, Souchon, & Durden, 2001). Whenever a customer has an inquiry, the first people they talk to are service workers also known as outward "face". Customers judge the level of services provided by a service organization through the quality of interaction between themselves and the service provider (Czepiel, 1990). Due to the participation of service workers in the manufacturing process, it carries a great deal of risk and uncertainty (Roland, 1999). There are three main components that influence the service encounter (Baker, 1987; Bitner, 1992; Keng, Huang, Zheng, & Hsu, 2007) and one of these components is employee factors, involving service workers (Wu, Cedric Hsi-Jui, & Rong-Da Liang 2009). The consumer is not sure whether the service worker will provide the desired service or not. From the consumer's view, it is very much possible that the service worker will make it difficult to the manufacturing process and prevent the service as desired from being manufactured (Namasivayam & Hinkin, 2003). Therefore, we can say that the service worker is an important player of service encounter. Treating customers equally in a service delivery process in presence of other customers will not leave any performance gap and ultimately this will lead to CSSW. Hence, we postulated the following.

H1: Perceived justice has a positive influence on customer satisfaction with service worker in an a) equity reward b) under reward c) over reward unique and d) over reward non-unique scenario.

Customer satisfaction with service organization (CSSO)

CSSO shows the positive feelings or degree of positive response to the service provider and service organization. The service organization is one of the two players involved in any service encounter. In a service encounter, a service worker treats some customers preferentially in presence of other customers. Hence, there is a chance that other customers may compare their ratio of rewards with the

ratio of rewards of other customers who received preferential treatment. In a recovery situation, the customer may remain satisfied with the organization even when a particular transaction caused dissatisfaction Oliver (1996). In such situations, customers do not perceive justice that ultimately results in customer dissatisfaction. Services cannot be experienced before purchase because of their intangible nature but customers try to look for tangible facts (Langeard, 1981). For instance, decor, stationery, business cards, signage and environmental design work as cues to influence the customer's expectations and build the firm's image (Baker, 1987; Booms & Bitner 1982). According to Bitner (1992), marketing mix elements may also influence satisfaction in service encounters. Therefore, we may assume that because of the other factors like servicescape, operational capabilities of service organization customers are satisfied with the service organization. Hence, we postulated the following hypothesis;

H2: Perceived justice has a positive influence on customer satisfaction with service organization in an a) equity reward b) under reward c) over reward unique and d) over reward non-unique scenario.

Customer service worker is one of the key components of service encounters. If customers are satisfied with the service worker then this may lead to customer satisfaction with service organization. Hence, we propose the following hypothesis:

H3: Customer satisfaction with service worker has a positive influence on customer satisfaction with service organization in an a) equity reward b) under reward c) over reward unique and d) over reward non-unique scenario.



Figure 1: Theoretical Framework

Methods

Sample

We collected data from a convenient sample of 195 students (120 male, 75 female) enrolled in masters' level degree program of the four universities were the participants of the study (Moon et al., 2018; Moon & Attiq, 2018). Söderlund et al. (2014) has used the sample size of 184 for this type of study, whereas David Garson, (2008) recommended 150 minimum number of respondents for such studies. Data was collected through a self-administrated questionnaire followed by a role-play scenario

(Murray, 1991). Students were asked to read the scenario and respond accordingly. As the focal service for this study, banking service was selected because numerous forms of preferential treatments can be witnessed in the banking sector. Furthermore, in banking service, specific service worker-customer encounters are quite easily noticeable to other customers.

Stimulus Development

A text-based role-play scenario was employed (Karandeet al., 2007; Söderlund et al., 2014) to manipulate the rewards for the customers. Each respondent was asked to adopt the role of a customer who was in a service encounter. The scenario was described as; a focal customer (A), other customer (B) and a customer service officer (CSO) of a bank were traveling to the bank on the same bus. After some time customers came to know that CSO was the employee of the bank where customers had accounts. There were four versions of the scenarios for each level of reward.

1. Neither A nor B are recognized by the CSO and no extra element for both (Equity Reward).
2. B, but not A, is recognized by the CSO and B receives extra element" (Under Reward).
3. A, but not B, is recognized by the CSO, and A receives extra element (Over Reward Unique).
4. Both A and B are recognized by the CSO and both received extra element (Over Reward Non-Unique).

In this study, the extra element was; being recognized and getting the priority in the queue inside the bank for transaction.

Measures

To measure the perception of justice, we adopted six items from Carr (2007) and Beugre' and Baron, (2001). To measure CSSO, four items were adopted from Fornell, (1992) and Johnson et al. (2001). Furthermore, to measure CSSW, three items were adopted from Mahn, Hee and Yoon (2004). Responses were collected on 7-points Likert scale anchored at 1 = strongly agree and 7 = strongly disagree.

Tools and Techniques of Analysis

For the analysis of data and testing of hypothesis, Structural equation modeling (SEM) was employed via AMOS 22.0. SEM is a to step procedure that is best suited to establish the reliability and validity of the constructs along with test ting causal assumptions (Anderson & Gerbing, 1988; Kline, 2015; Hair et al., 2016)

Results & Analysis

Out of 195 individuals who participated in the study, 75 were females and 120 were males (38.5%, 61.5% respectively). However, 8% of the consumers were below 20 years of age, 29% were between 21-30 years, 33% were between 31-40 years, 22% were between 41-50 years and 8% were

of the age above 50 years. We assessed the normality of data by Kurtosis (± 3) and Skewness (± 3). Values of all observed variables were within the recommended range of Skewness and Kurtosis that means the data is normally distributed.

Table 1
Descriptive Statistics

	Variable	Mean	Std. Dv.	Skewness	Kurtosis
Equity Reward	PJ	1.94	0.65	1.72	2.77
	CSSW	2.84	0.93	0.73	2.64
	CSSO	2.20	0.83	1.95	1.59
Under Reward	PJ	5.27	1.56	-1.05	0.25
	CSSW	4.90	1.45	-1.07	0.34
	CSSO	4.47	1.49	-0.27	-1.30
Over Reward (Unique)	PJ	3.41	1.04	1.17	2.24
	CSSW	1.93	0.66	.41	-0.27
	CSSO	2.73	1.22	1.21	1.25
Over Reward (Non-Unique)	PJ	2.58	0.77	1.03	1.89
	CSSW	2.42	0.68	0.56	-0.15
	CSSO	2.51	0.78	0.57	0.061

To measure reliability, values of composite reliability (CR) and Cronbach's Alpha was used. Fornell & Larcker (1981) argued that $CR \geq 0.70$ is a minimum threshold for measuring the reliability of a construct. Whereas ≥ 0.70 is a minimum threshold for Cronbach's Alpha (Hair et al., 2010). Table 2 shows the values of CR and Cronbach's alpha. The values of CR and Cronbach's alpha that are higher than the minimum threshold and this also indicates the reliability of our constructs. Furthermore, we used average variance extracted ($AVE \geq 0.5$) to establish the convergent validity (Fornell & Larcker, 1981). AVE for all latent constructs surpasses the required threshold indicating the validity of scales.

Table 2
Cronbach's Alpha and Composite Reliability (CR)

Variable	AVE	CR	α
Perceived Justice	0.56	0.78	0.77
Satisfaction with Service Worker	0.61	0.76	0.79
Satisfaction with Service Organization	0.54	0.83	0.84

Notes: CR: Composite Reliability, α : Cronbach's Alpha, AVE: Average Variance Extracted

Hypothesis Testing

For testing the hypothesis, structural equational modeling (SEM) was used and the results are presented in Table 3. In case of equity reward, results of SEM shows that PJ is largely involved in predicting the CSSW (H1: $\gamma = 0.27$; $p < 0.05$) and CSSO (H2: $\gamma = 0.42$; $p < 0.05$). CSSW leads towards the CSSO (H3: $\gamma = 0.35$; $p < 0.05$). In this case, all of the hypotheses are supported by the results. In case of under reward, results of SEM shows that PJ has a positive influence on CSSW (H1: $\gamma = 0.64$; $p < 0.05$) and CSSO (H2: $\gamma = 0.47$; $p < 0.05$) and CSSW has a positive influence on CSSO (H3: $\gamma = 0.30$; $p < 0.05$). In this case, all of the hypotheses are supported. In case of over reward (unique), results of SEM shows that PJ has no influence on CSSW (H1: $\gamma = -0.02$; $p > 0.05$) and CSSW does not predict CSSO (H3: $\gamma = 0.62$; $p > 0.05$). Hence, H1 and H3 are not supported. But PJ is predicting CSSO (H2: $\gamma = 0.55$; $p < 0.05$) resultantly, H2 is supported by the results. For over reward (non-unique), results of SEM shows, that PJ is involved in predicting CSSW (H1: $\gamma = 0.18$; $p < 0.05$) and CSSO (H2: $\gamma = 0.40$; $p < 0.05$). Furthermore, CSSW leads to CSSO (H3: $\gamma = 0.26$; $p < 0.05$). All of the hypothesis are supported in this case.

Table 3

Structural Model Analysis for Equity Reward, Under Reward, Over Reward (Unique) and Over Reward (Non-Unique)

Treatment	Hypothesis				Estimates	p-values
Equity Reward	H1	PJ	→	CSSW	0.27	0.04
	H2	PJ	→	CSSO	0.42	0.00
	H3	CSSW	→	CSSO	0.35	0.00
Under Reward	H1	PJ	→	CSSW	0.64	0.00
	H2	PJ	→	CSSO	0.47	0.00
	H3	CSSW	→	CSSO	0.30	0.02
Over Reward (Unique)	H1	PJ	→	CSSW	-0.02	0.86
	H2	PJ	→	CSSO	0.55	0.00
	H3	CSSW	→	CSSO	0.06	0.62
Over Reward (Non-Unique)	H1	PJ	→	CSSW	0.18	0.04
	H2	PJ	→	CSSO	0.40	0.00
	H3	CSSW	→	CSSO	0.26	0.00

Indirect Effects

Indirect effects of PJ on CSSO were examined under all the (four) scenarios. In case of equity reward, results indicate that PJ has a significant indirect effect on CSSO ($\gamma = 0.51$; $p < 0.05$) while direct effect becomes insignificant ($\gamma = 0.39$; $p > 0.05$), indicating a full mediation. While measuring under reward, results indicate that PJ has a significant indirect effect on CSSO ($\gamma = 0.63$; $p < 0.05$) while direct effect becomes insignificant ($\gamma = 0.43$; $p > 0.05$), indicating a full mediation. While testing for over reward (unique), PJ has significant indirect effect on CSSO ($\gamma = 0.62$; $p < 0.05$) while direct effect remains significant ($\gamma = 0.54$; $p < 0.05$), indicating a partial mediation. For over reward (non-unique), PJ has a significant indirect effect on CSSO ($\gamma = 0.55$; $p < 0.05$) while direct effect becomes insignificant ($\gamma = 0.41$; $p > 0.05$), indicating a full mediation. Data analysis showed that receiving preferential treatment versus not receiving the preferential treatment yields different levels of customer satisfaction with service worker and service organization.

Discussion

Overall results of the hypothesis are supporting the findings of several previous studies which showed that there is a positive association between perceived justice and customer satisfaction. Our study extended the findings of Söderlund et al. 2014 by measuring customer satisfaction in two ways. When customers perceive justice, then the level of CSSW and CSSO is high. Customers showed their satisfaction with service worker and service organization when they received extra element along with other customers (over reward non-unique), and when the extra element (preferential treatment) was only given to focal customer then there was no relationship between CSSW but with the CSSO (over reward unique). In other words, under the scenario of Over Reward (unique), the focal customer was not satisfied with the service worker but was satisfied with the service organization.

Furthermore, our study also extended the finding of Gwinner et al. (1998) by showing that there is a positive association between CSSW and CSSO. If the customers are satisfied with the services provided by the service worker then it will lead to the customer satisfaction with service organization, and this is what we observed under the scenarios of Over Reward (unique) and Over Reward (non-unique). A positive relation has been observed between receiving preferential treatment and numerous variables like market share, purchase behavior, positive word of mouth and customer satisfaction (Lacey, 2007; Gwinner et al., 1998). But these studies talk about the service encounters with a social vacuum that reflects the non-presence of other customers and the only focal customer is receiving the treatment. Whereas, our study is conducted in an environment where other customers are present in service encounter and can easily compare the ratio of their rewards with the focal customer. More precisely, our finding shows that receiving Over Reward (unique) in presence of other customers does not result in the CSSW. Furthermore, past studies about the preferential treatment in service encounters like Söderlund et al. (2014) talks about the customer satisfaction generally, whereas our

study distinguishes between the customer satisfaction with two major players of service encounter that includes CSSW and CSSO. Therefore, by distinguishing between CSSW and CSSO in service encounter our study provides that a customer can show his/her satisfaction with service organization but not with service worker simultaneously or vice versa in a service encounter.

Managerial Implications

Our results suggest that the preferential treatment can be a source of a decrease in customer satisfaction. Additionally, our study suggests that managers should reconsider the policy of preferential treatment (if exists) since the customers who receive the extra element does not show satisfaction with the service worker. Therefore, the manager should design their policies in a way that it can be a source of customer satisfaction in the longer run. Furthermore, managers should also focus on the customers who are feeling unwelcomed when they don't receive preferential treatment while other customers are receiving. Moreover, our results also indicated that customer satisfaction with the service worker is a source of customer satisfaction with service organization. Therefore, this study suggests that management should form policies for the training of service workers and to carry out day-to-day operations in a way that it can lift overall customer satisfaction.

Future Recommendations

The most important limitation due to which the research suffered is that the extra element is a priority in a queue – an object that is more important for some customers. Preferences of the customers diverge from customer to customer, that's why this element may have less salient effects on some customers. Different types of extra element can be used as a preferential treatment so the type of extra element will affect the situation in some other way. Furthermore, this study is purely conducted in the context of Pakistan. Between Pakistan and other parts of the world, a lot of cultural difference can be observed and that is unavoidable in nature. Further research should be conducted in some other cultural context to generalize the results. Responses were confined to only four major universities of Pakistan. Further researches must include some other universities as well as consumers from other fields of life. In this study, data were collected only from the students. Moreover, reward manipulation was based on the distributive justice that is one dimension of justice defined by Adams (1963). In future researches, this limitation must be addressed by the inclusion of other dimensions of justice.

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INTEREST RATE PASS-THROUGH EFFECT USING VECM: EVIDENCE FROM PAKISTAN

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Abstract

This research paper examines empirically the interest rate pass-through for Pakistan. Using treasury bills rate (proxy for policy rate), weighted average lending rate (WALR), weighted average deposit rate (WADR), to represent networks of lending and deposit rate - six-month call money rate (CMR) and CPI are tested from 2006 – 2015 on monthly frequency. Vector error correction model (VECM) has been applied after checking the stationarity in the series following variance decomposition, impulse response function and Wald test. In Pakistan, the impact of pass-through on call money rate and CPI has been resulted only in short run while in the long run, the impact of pass-through has been resulted on all the exogenous variables in the system.

Keywords: Monetary Policy, Call Money Rate, Lending, Deposit Rates, Pakistan.

JEL Classification: M290

Introduction

Background/preamble

The innovation in interest rate is important from a price and financial stability viewpoint. The traditional view is that, the cost of capital is influenced due to change in real policy rate that in turn affects investment and consumption to the extent which in turn also affect the prices and level of income earned (Mishkin, 1995). Recently, almost all-central banks directed monetary policy through market-orientated tools in the manufacturing countries has devised to influence short-range interest rates (Borio, 1997). Central banks have more dominant role in money market interest rates and financial market conditions; thereby interest rate money market is set. Market rates with longer time periods and banks' interest rate policy get affected due to variation in policy rates in varying degrees. Banking prudential regulation policy and their decisions has great impact on the behavior of

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consumers whether corporate or general consumers when they are interested in making returns on assets and liabilities of the banks.

In this changing world and globalization scenario, understanding of monetary transmission is the basis of modern monetary policymaking- a mechanism that allows the central bank to move the economy in desired and set directions and transmits the policy to real sectors. The usefulness of monetary policy is determined through the speed and potency of the transmission mechanism. The mechanism is complex, however, and with different shapes or degree depends on the factors such as macro-economic conditions, financial market assembly and growth, governing agenda and worldwide impacts of crisis.

The interest rate channel is the most traditional mechanism among the various channels of monetary transmission and has been exposed to intense analysis and high attention. The attention to monetary mechanism gets its pick when CPI was considered in a monetary policy framework for which the interest is the main pillar. It is important for head of the banks, CPI targeted to know the extent of changes in policy rates affect CPI over a certain period of time. According to the Taylor principle, to stabilize CPI, a central bank should increase its interest rate more than one-to-one with increases in CPI (Benigno & Woodford, 2003). For effective monetary policy, it is essential that alteration in the authorized interest rate (official interest rate) be transferred to other rates quickly and the amount of the change on to other rates is large enough to influence aggregate demand at least to certain level (Kim & Lim, 2001). Thus, it is worth to describe the extent of interest rate impulse in order to establish the efficacy of the economic policy transmission mechanism. The importance of monetary policy transmission mechanism and the curiosity of policymakers have resulted into many theoretical studies over the past decades to reveal its properties and to understand its functions. It is necessary that financial sectors should have know-how about the nature of policy rate because it directly determines the sustainability of the system working and formulating the rates (Aydin, 2007; Hofmann et al., 2006). Furthermore, the banks' prices sets influence their margins, cost-effectiveness. There was rapid interest rate adjustment development in the USA banking sector, dedicated to the degree of interest rates adhesiveness and their unevenness (Hannan & Berger, 1991, Neumark & Sharpe, 1992). Observed outcomes are as follows, of one is that there is partial response to interest rates i.e., the policy rate is partially pass-through to retail rates and other interest rates. Second, pass-through differs considerably within and outside the country. Third, interest rates pass-through differ subject to the type of interest rate used according to the state's general practice and literature. Lastly, researchers that consider asymmetry adjustments found asymmetric sign, which mainly differs across region. Reasons for the extent of fluctuations of pass-through and asymmetric pass-through across globe and includes over the period if the policy era is moderate, rigid with strict compliance of the regulations (Egert, et al., 2007), the chapter of financial market progress (Cottarelli & Kourelis, 1994; Borio & Fritz, 1995; Weth, 2002), the parallel of financial market directness, the focus within the banking sector, lop-sided information exchanging cost, bank size (Hannan & Berger, 1991).

Fluctuation and changes in oil prices affects reserves and balance of payment of country, which passes the impulse to currency rate and interest rate shocks. In a decade the oil prices have shown many fluctuations from high to low with much influence on economic indicators rates such as CPI etc. For controlling the situation, central bank goes for forming different policies. Therefore, the (SBP) operationally, influences the treasury bills rate (proxy to interest rate) on the assumption that the shocks in it bring changeability in all other charges and rates with different effectiveness. The cost of capital and thus level of investment and consumption in the economy is persuaded due to alteration in these rates. Prior justification of the monetary transmission machinery makes it clear then it becomes difficult, to use the passages that involve interest rate to affect level of output and so, for the SBP when the benefit in the basic rate is not transferred to other distinctive rates. Hence it is vital to trial whether the changes in the treasury bills rates are dispatched on WALR, WADR and CMR, to other rates and if yes at what speed and to what extent. This study answers the following questions.

- What is the extent of IRPT in Pakistan?
- What is the degree of pass-through from the money market or the policy rate to the deposit and lending rates,
- What is the speed of pass through to different rates of call money rates and CPI rates?
- Are variables such as lending rates, deposit rates, call money rates and CPI rates impact the treasury bills rate?

The main objective of the base paper is to understand the central banks' interest rate policy with innovation in rate. The focus of this topic is an important part of the monetary transmission mechanism that is the deviation in bank charges with respect to money rates. The study tackles the questions of the magnitude of pass-through, or there is fully pass-through or not when the study is under consideration, the reasons of lesser impulses and if there is unevenness or irregularity in the nature of shock of treasury bills rate. The result is that the reaction of innovation from the treasury bills rate to financing and credit rate are much less in the shock period that is the lending and deposit rate shows much stringency (Cottarelli & Kourelis, 1994; Hanan & Berger, 1991). For upward and downward policy rate, the nature of pass-on is not normal or equal (Hanan & Berger, 1991). The studies have shown that for three months the market rates is not reflected entirely in the bank's financing rates but the case is reverse over the long tenor with higher blows. They were the first to study the model of autoregressive distributed lag to see the changes of market rate to the change in advancing rates in different countries (Cottarelli & Kourelis, 1994; Fritz, 1995). Also the short-term slowness is found in short-term bank lending rates to enterprises, but assumes a priori a complete long-term pass-through (Heinemann & Schuller, 2003). All of the reports indicates that the shocks for the long-term bank lending rates is less complete than for lending to enterprises for short term period (Heinemann & Schuller, 2003). The main message is that the deposit rate changes are due to minor costs. The variation in security rates result a change in the deposit rates only if the costs involved in changing the payments rate is less than the revenue involved. Thus main findings are; impulse differs directly with the depositors' base and inversely with degree of market concentration. These findings

are attributed to banks' ability to employ market power in the deposit market. Different analysis is conducted in that era which comes with the view that regulation and rates tremor differ across European (Mojon, 2000). The main outcomes of the analysis are: pass-through is lower from money market rates to credit rates due to volatility of money market rates while the situation is reverse in case of CPI. Banks are also involved in speeding up the rates due to increase competition. There are various studies that support the inflexibility of bank rates on treasury bills rate is listed (Mojon, 2000). First, the borrower pays more with increase in bank standing rates. The increase in lending rates affects the credit ability of customers as the burden is transferred to them that reduce their ability to pay the loan. Second while resetting retail rates even small menu costs incurred could lead to price rigidity. Third, still bank provides clear rate guarantee by not revising the rate in despite change in money market rate. That's why; long-term relationship investment is preferred by bank. Fourth, the problem with mismatch in maturity exists with lower pass-through for longer rates and higher pass-through for short-term rates. Finally, perhaps there would be ambiguity about future due to the volatility of the money market rates. With every time changes in rates, the banks suffer with costs at the time of rates adjustments. This will result in delaying the lending rates by bankers until the banker adjusts the money market rates. Different sources and factors add to the costs, which makes the bank to clarify the rigidity of the rates (Nabar et al., 1993):

The pass-through is examined in the retail banking markets of euro-zone area and found that with predicted monetary shocks the loan rates response is speedy (Kleimeier & Sander, 2006). Overall, this study agrees that degree of short-run bank interest rate stickiness is a considerable. There is incomplete pass-through to call money rate in Asian countries (Wang & Lee, 2009). In 1991 with the introduction of the market based monetary management in Pakistan the treasury bills have been increasingly used as a tool of monetary policy. The greater degree of pass-through and short duration results in output of monetary policy and price level. It is vital to see the changes in rates with respect to Pakistan.

For this study purpose the model used is vector error correction model (VECM) and the equation for general vector error correction model with deterministic trend is taken from the

$$\Delta Y_t = \phi + \beta Y_{t-1} + \alpha t + \sum_{i=1}^{p-1} \gamma_i \Delta Y_{t-i} + \epsilon_t \dots \dots \dots (1)$$

This can be rewritten for test equation as:

$$\Delta Y_t = \phi_1 + \alpha_1 t + \gamma(\beta' Y_{t-1} - \phi_2 - \alpha_2 t) + \sum_{i=1}^{p-1} \gamma_i \Delta Y_{t-i} + \epsilon_t \dots \dots \dots (2)$$

Where $\phi = \phi_1 - \gamma\phi_2$ and $\alpha = \alpha_1 - \gamma\alpha_2$

The intuition of this expression is that a change in can come from the time trend, or the error correction part of the expression (the error correction part is the only in parenthesis). The last part of the expression with a summation from i=1 up to p-1 of lagged values of the differenced dependent variable is used to eliminate serial correlation.

Research Data & Empirical Analysis

High frequency monthly data has been collected from Statistics & Warehouse department of State Bank of Pakistan for the measurement of pass-through. The variables are monthly treasury bills rate, deposit rates; lending rates (disbursement), call money rate and CPI rate etc. Weighted average lending and deposit rates (marginal) are used for simpler lending and deposit rates required for the analysis. The sample period is from January 2006 to December 2015 as per the availability of the data. For the analysis of this study, monthly data is taken into consideration of treasury bills rate (proxy of interest rate) on weighted average lending rate, weighted average deposit rates, call money rate and CPI rate, variables, from Pakistan's central bank and commercial banks perspective. Descriptive statistics of the individual variables are observed through running regression to see if the data is statistically acceptable or normal. The basic model used is VECM (vector error correction Model). The unit root test is run to see if the data is stationary or non-stationary to check the random walk behavior. Granger causality test is also applied to see the joint effect of independent (lag) variables on dependent variable as drawn from the VECM model, to check the significance of variables.

Descriptive Statistics

Table 1

Descriptive Statistics

Var:	Min	Max	Mean	Median	SD	Kurtosis	Skewness	JB. P value
TB	6.3	14.01	10.45	9.98	2.05	2.01	0.02	.08
CMR	6.45	16.04	10.97	10.14	2.15	2.64	0.13	0.59
CPI	1.30	25.33	10.26	9.02	5.23	4.07	0.98	.000
WADR	2.94	7.86	5.68	5.65	1.10	2.14	-0.08	0.14
WALR	7.98	15.01	11.86	11.12	1.72	2.05	-0.08	.096

The descriptive statistics summarizes the analysis that helps to better understand the figures or numbers. Table 1 shows the description of each variable to see the minimum, maximum values, standard deviations, and kurtosis and probability value of Jarque-Bera if the variables are significant enough to run the model directly with Pakistan's perspective. The minimum rates for Treasury bill is 6.3, with high value of 14.01 and mean value of 10.45. The dispersion value is 2.05 that are more from the mean value of discount rate. Kurtosis channels the top or peak to check the normality distribution of the variable. The TB kurtosis is less than value 3, so the nature is flat (platykurtic). Skewness is measure of the disparity and irregularity. The value 0.028 indicates the positive skewness, having right tail. While the JB P-value shows that the data is normal as its value is more than 5%.

Analyzing CMR, the high and low values lie in 16.04 and 6.45 with average value of 10.97 and median value of 10.14 with dispersion value of 2.15 from its mean value. The nature of graph is level (platykurtic) and skewness with positive value of right-tailed. The probability value interprets that the variable is normal as p-value is more than 5%.

Similarly, CPI has an average value of 10.26 with leptokurtic behaviour and positive skewed value with less probability value than 5%, showing non-normality.

Further, the averages of WADR and WALR are 5.68 and 11.86 with a skewed value of negative tailed and (platykurtic) behaviour with probability values more than 5%, indicating normality of the data.

Table 2

Unit Root Test (Random Walk Test)

Variables	Order of Integration	ADF Test	Null Hypothesis
CMR	I(0)	0.7551	Not rejected.
	I(1)	0.00	Rejected.
TB	I(0)	0.84	Not rejected.
	I(1)	0.00	Rejected.
CPI	I(0)	0.82	Not rejected.
	I(1)	0.00	Rejected.
WDAR	I(0)	0.24	Not rejected.
	I(1)	0.00	Rejected.
WALR	I(0)	0.74	Not rejected.
	I(1)	0.02	Rejected.

Lag Selection Criteria

Lag length selection is a trade-off the curse of dimensionality and reduced models, which are not appropriate to specify the active adjustments. The literature reviews suggest that the lag length should be twelve (12) for monthly time series data. There are many criteria, which is used to go for the lag selection such as Akaike information criterion, Schwarz information criterion and Hannan-Quinn information criterion. With lag length to be short, the error terms autocorrelation leads

to significant and inefficient estimators resulting in wrong results.

Table 3
Lag selection criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-204.02	78.8	5.47e-05	4.37	5.12	4.67*
2	-169.26	62.38	4.57e-05	4.19	5.56	4.74
3	-139.50	50.62	4.21e-05*	4.10	6.10	4.91
4	-115.66	38.31	4.37e-05	4.12	6.74	5.18
5	-101.10	22.04	5.43e-05	4.31	7.56	5.63
6	-79.95	30.04	6.05e-05	4.39	8.26	5.96
7	-49.04	41.01	5.70e-05	4.28	8.77	6.10
8	-18.15	38.10	5.48e-05	4.17	9.29	6.24
9	13.62	36.23	5.29e-05	4.04	9.78	6.37
10	38.16	25.68	6.03e-05	4.05	10.42	6.63
11	55.70	16.72	8.10e-05	4.19	11.18	7.02
12	101.31	39.22*	6.73e-05	3.80*	11.42	6.89

The lower the value of lag the better is the model so AIC has low value of lag at 12 so twelve lag is taken as shown in the table below for further running the models.

Johansen Cointegration Test

Johansen first ran Johansson cointegration in 1988, having desirable properties, including the fact that all variables are tested as endogenous variables and to eliminate serial correlation with desired number of lags. In this test, a set of variables is defined as cointegrated if a linear combination of them is stationary. The precondition for the variables to be cointegrated is that they should be non-stationary at level while stationary at first difference. A cointegrating relationship may also be seen possible that variables may deviate from their relationship in short run but with long-run association over the period. If there were no cointegration among the variables, there would be no long-run relationship binding the series. For testing the co-integration we will see the unrestricted trace test and maximum Eigenvalue test to check is there any cointegration or not among the variables under observation by running Johansson cointegration test.

H0: There is no cointegration among variables

H1: There is cointegration among variables.

Table 4
Johansson Cointegration Test

Trace or Rank test				
# of cointegration	Trace statistics	0.05 Critical Value	Prob**	Null Hypothesis
None *	101.6574	69.81	0.00	Rejected.
At most 1 *	56.05295	47.85	0.00	Rejected.
At most 2	22.69128	29.79	0.26	Not rejected.
Maximum Eigenvalue test				
# of cointegration	Max-Eigen Statistics	0.05 Critical Value	Prob**	Null Hypothesis
None *	45.60449	33.87687	0.0013	Rejected.
At most 1 *	33.36167	27.58434	0.0081	Rejected.
At most 2	15.07836	21.13162	0.2835	Not rejected.

There is long-run relationship or association ship between the variables or the variables move together as the variables are cointegrated as trace test indicates 2 cointegrated equations at the 0.05 levels. Similarly the maximum Eigenvalue also indicates the same level of cointegration among variables over the long period. We accept the null hypothesis at 2 cointegrated levels and reject the null hypothesis at level of none and first level, as critical value is less than the max-eigenvalue statistics or p-value is less than 5%.

Vector Error Correction Model (VECM)

After applying the Johansen cointegration test for the variables not being stationary at level but stationary at first difference, the existence of co-integration gives inside to go for the vector error correction model. For the whole system, one cointegrated equation is undertaken. VECM is a system equation, means variables can be solved simultaneously. In the VECM model, the lag values of variables explains the dependent variables in VEC model but it can be best explain with the help of p-value and is significant if it is less than 5%.

The cointegrating equation part represents the long-run equilibrium relation. The equation developed is; $DTB (-1)+0.028902-3.535318 * DWADR (-1)-2.568446 * DWALR (-1)+2.277913 * DCPI (-1)$. While the error correction part represents the short run relations.

Impulse Response Function

Impulse function is developed to see the shock of variables to other variables over a period of time. It explains the function to see the response of variables (its lag values) to main variables. The impulse response function indicates that the six months treasury bills rate pass-through has negative effect on DWADR at the initial period of two, while it is raising and declining with positive and negative impact over other period in the long run. Response of DWADR to TB is positive over the long period with high trend at initial periods but a little decline in the period end. Response of DWALR is also positive and high over the short period with minor decline in the long run but responds over all the periods. DCMR response to DTB is highly positive at initial period with fluctuations onwards in the long run period. Response of DCPI to DTB is negative in the short run but increased very minute over the long run means there is response to the periods overall.

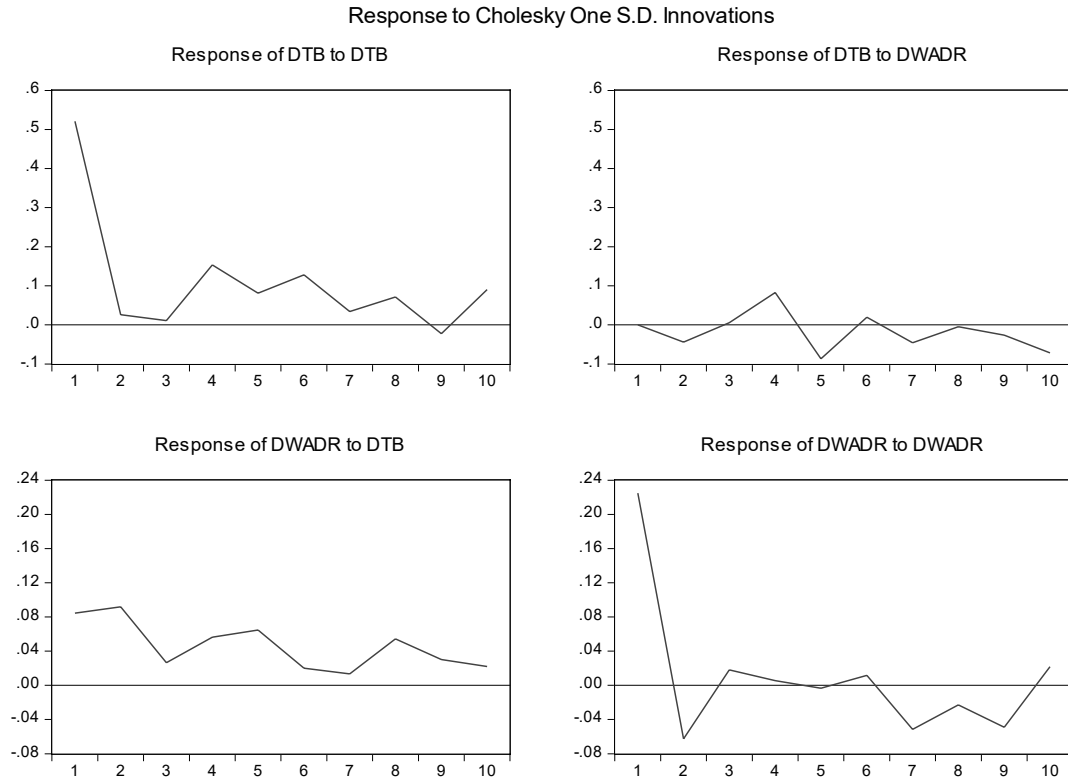


Figure 1: Response to Cholesky One S.D. Innovations

Variance Decomposition function

Variance decomposition explains the percentage shock of one variable to other variables (Hamilton, 1994). In the short run period of three, the innovation or shock to DTB is 74.1955 percent, variation of fluctuations in the DTB (own shock), impulse in DCMR (call money rate) can cause 1.263621 percent fluctuation in DTB (treasury bills rate). The shock in DWALR (weighted average lending rate) can cause 11.9253 percent change in DTB (Treasury bill rate). The shock in DWADR is 0.99094 percent variation in DTB, which is very minute variation. In the long run, the shock to DTB (own) shock can contribute 53.13 percent to DTB, which is great variation of own shock. The shock/innovation to DCMR can contribute 9.75 percent fluctuations in the variance of DTB, which is great variance from short run. Also the impulse in DWALR is 11.42 percent, contributing variance in

DTB, which is slight variation from short time period. The innovation in DWADR contributes 9.09 percent fluctuations in DDR in the period 10, which is high change from period three. The contribution of WALR is almost same which means the story remains unchanged while WADR and CMR causes a fluctuation in the long run. Statistically, it can be said that in Pakistan, the impact of pass-through on call money rate and CPI has been resulted only in short run while in the long run, the impact of pass-through on has been resulted on all the exogenous variables in the system.

VAR Granger Causality/ Block Heterogeneity Wald Tests

Granger causality tests examine if the variables lagged value helps to predict the dependent variables or to check the independent variable can cause the dependent variable. Tests of these forms were described by Granger (1969) and a slight variant due to Sims (1972). However, finding the causality doesn't mean that variations or shocks in one variables result in variation to other variables. It implies the sequential arrangement of movements in the time series.

Table 5

Wald Test (DTB as Dependent Variable)

Series	Joint Level of Significance (lag values) 5%	Null Hypothesis
DCPI	0.23	Rejected.
DWDAR	0.02	Not rejected.
DWALR	0.08	Not rejected.
DCMR	0.09	Not rejected.

H0: DWADR, DWALR, DCMR, DCPI cannot cause the DTB.

H1: DWADR, DWALR, DCMR, DCPI can cause DTB.

Taking the DTB as dependent variable and others as independent variables, joint values of DCMR and DWADR, DWALR helps to forecast the DTB at the significance level of 5% and 10% as the probability values are 0.0988, 0.0274 and 0.0884, so accepting the alternate assumptions and getting the null hypothesis to be rejected for the variables DWADR, DCMR, DWALR While the DCPI is more than the desired critical value so we accept the null hypothesis for CPI. From the Granger casualty test, the joint values (all lag values) of call money rate, weighted average lending rate and weighted average deposit rate helps to forecast the treasury bills rate at significance level while CPI has no significant contribution to TB or CPI and TB are independent of each other. Further we can also go for interpreting by taking the DCPI, DWADR and DWALR as dependent and see the other independent variables cause on the endogenous variables respectively. The pass-through from treasury bills rate to CPI exhibit rigidity or no significant cause in the period of impacts or shocks.

Conclusion & Recommendations

Pakistan is an emerging economy and on the way towards development and effective changes. The influence of its policies and monetary transmission mechanism set out the rates for the whole economy to run in the best possible way. The important variables, which are to be decided and studied thoroughly by central bank and help in deciding the rates to be imposed to run the monetary mechanism, are lending rates and deposit rates (the main rates), call money rates and CPI in response to change in six months treasury bills rate (proxy to interest rate in case of Pakistan). The study went through examining the impulse and cointegration on all variables. The results show that there is significant pass through from six months treasury bills rate to call money rate and weighted average lending and deposit rate in Pakistan. However, the pass through is insignificant for CPI rate means this variable does not cause the treasury bills rate (proxy to policy rate, a change than pass literature or researches conducted). In real the pass-through is sharp and quicker from initial periods to end periods in case of findings for CMR and WADR with slight or same pass through in the short and the long run. Further researches can be conducted by taking the treasury bills rate as dependent variable as a proxy to see the influence, cointegration or interdependencies to other influential rates in the running economy with increased number of observations from authentic sources. This paper can provide knowledge or basis for treasury bills rate pass-through to economic indicators to further the research process. The result from this research will help to widen the horizon by considering the treasury bills rate as effective variable with respect to other variables by taking the costs and fluctuations in policies under considerations.

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STUDY OF WORK RELATED STRESS AND JOB SATISFACTION AMONG FEMALE BANKERS

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Abstract

The objective of this study was to empirically investigate the identified causes of work related stress and their influence on the job satisfaction level. The respondents were female bankers working in Karachi. Close ended questionnaire was used to collect the response from (n=345) female bankers. To collect the response from the female bankers was a bit difficult task therefore convenient sampling technique was applied. Through Structural Equation Modeling (SEM) it was found that variables such as, work load and working relation significantly causes the work related stress among bankers; which eventually causes the negative level of job satisfaction of the female bankers, however positive level of work related stress predicts the positive level of job satisfaction. The study highlighted the significance of job satisfaction and causes of stress among bankers. The timely response the stressors among female bankers can motivate to show higher order commitment.

Keywords: Work Stress, Job Satisfaction, Female Bankers, Structural Equation Modeling.

JEL Classification: Z000

Introduction

The organizations like banks normally exhibit zero tolerance to struggling performance due to their very nature. This nothingness of space to heave the sigh of relief causes the stress among the workers. Eventually this paranoia is translated into counter work behavior and turnover intention; hence dissatisfaction may occur.

The etiology of anxiety and stress are case specific and condition sensitive, thus it would be fatal exercise to argue that working environment and nature of job does not influence in terms of etiological role (Steyna & Vawdab, 2014). Generally agreed upon perception prevails that owing to work related stress various signs and symptoms can be witnessed. For example stress carries the elements like unreasonable workload and interpersonal divergence with peers and managers (Berger, Sedivy, Cisler, & Dilley, 2008).

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The association between stress and satisfaction remain the focal point of discussion among academic scholars, for instance, Mahfood, Pollock, and Longmire (2013) found that stress substantially influence the level of job satisfaction of employees. The employees in public dealing organization are vulnerable to dual indentifiable stressors one is from customer related and the other is organizational related. Kim, RO, and Hutchinson (2014) have documented that customer agressiveness can cause to diminish employee level of satisfaction with job. In service based organizaitons customer dominance is all encompassing norm. Hence, it is beleived that "Customer is always right" (Yagil, 2008) or in the words of Reynolds and Harris (2006) "customer is king". This preference ushers the superiority complex among customers and causes the organization to value even incivility of customers and eventually stress emerges among employees.

Due to high sensitivity of being women, female workers are more vulnerable to stress and scummbed to it considerably. Levoskaa and Kiukaanniemib (1994) investigated the psychological stress due to external factors and job satisfaction among female workers and found that stress due to external factors causes the deviation in the level of job satisfaciton. This research is intended to comprehend the effect of stress among femaler banker evidences from karachi based banks.

Despite of the significance of female employee contribution in growing financial sector of Pakistan, least literary evidences can be traced in scholarly research. This study therefore attempts to analyse the influence of job related stress among female bankers, and its influence on the level of job satisfaction. The findings of this study will equip the heads of financial institutions to put critical vigilance on the causes of stress.

Problem Statement

Human capital being distinct species used to get inspirations from feelings. The passions, pathos, emotions, sorrows, agonies, and many more feelings are in human instinct. The extreme negative feelings turn into counter behavior, such as stress. In working settings stress is an outcome of several factors such as; excessive work load, working environment. The stress to accomplish the given task in the work setting is considered as positive stress. However the negative stress or extreme anxiety results in counterproductive behavior. The female workers are always prone to stress due to their caring and sensitive nature. It multiplies its intensity if the job is in financial institution, particularly banks. This study therefore has been conducted to investigate the stress level among female bankers.

Purpose of the Study

The study was intended to investigate the causal effect of stress on job satisfaction among the female bankers. Owing to cost and time constraint, the study is limited to Karachi based private banks.

Significance of the Study

The working environment in services organizations, particularly bank is becoming demanding as the day passes, various types of services have been introduced by banks to provide financial services to customers. This has created an environment of timely services to customers with utmost diligence. A considerable number of female employees have been hired in banks who perform different jobs and banks also look forward to better job performance from female employees. The challenging nature of job may create stress among female employees. This research has attempted to study that, if the stress is translated into discontentment with the job, with special reference to female bankers in Karachi. The respondents of this study were female bankers working in private bank in Karachi. The findings of study may be used as input in policy making for female bankers.

Literature Review

Suraj-Narayan (2005) explains that job related stress can be described as an exhibition of sentimental, emotional, intellectual, attitudinal and physiological response to unpleasant and pernicious aspect of job, and working conditions. Working life with existence of stressors, that are unbearable, uncontrollable, prolong in nature, or poorly dealt can cause the irregularity to work, struggling to performance, turnover intention, counterwork behaviour and ofcourse low level of job satisfaction (Musikanth, 1996; Ashraf, Ahmad, Shaikh, & Bhatti, 2014). An employee in an organization with inbuilt stress due to the nature of job, the chances of negative work behaviours and anxiety become high.

Work Related Stress and Gender

Generally to be active in working environment is associated with positive health for both men and women equally (Baruch, Biener, & Barnett, 1987; Malley & Stewart, 1988). However the oodles of work related stress can bring hazardous effects both in terms of physiological and psychological employee outcomes. The reaction to the work related stress has been studied as significant demographic characteristic with regard to gender (Todd & Linda, 1985). It has also been reported that there is no significant difference between male and female reaction to the work related stress (Martocchio & O'Leary, 1989). However the differences both in stressors and intensity of stress has been reported between the genders (Nelson, Quick, Hitt, & Moesel, 1990; Nelson & Quick, 1985). Although the both male and female are exposed to similar stressor, but the female experience to stressor is also unique (Cooper, Dewe, & O'Drisc, 2001). It is essential to identify the stressors that are distinctive to female employees, which in turn will help to single out the specific needs of female workers (Hobfoll, Geller, & Dunahoo, 2003), found that work place support has significant contribution in minimizing the work related stress among male worker than female employees. Studies have reported that female employees are specifically exposed to number of stressors, such as workload (Krantz & Lundberg, 2006; Heinisch & Jex, 1997), relationship with managers (Kaliniene

& Ustinaviciene, 2013; Kinman & Jones, 2005). Several studies have documented mixed findings regarding stress and gender sensitivity. Gerdes (1995) observed the chronic work related stress and higher physiological symptoms of stress among female workers than their male co-workers. Whisman and Kwon (1993) concluded no difference in response to stress among male and female workers. The reaction of work related stress into job satisfaction have been rarely studied in Pakistani context, with special emphasis on female bankers. This study has therefore investigated the workrelated stressors among female bankers, and their exhibition to the level of job satisfaction (Trivellas, Reklitis, & Platis, 2013).

Workload and Stress

Before 1970's the term workload was not a frequently used construct, and people from various disciplines remained disagree regarding its origin, mechanism, outcomes and measurement (Panel on Workload Transition, 1993, p 54). Workload can be viewed from three distinct aspects: amount of work and number of things to do, time allocated to accomplish the task, and cognitive experience of the person who performs the work (Lysaght, et al., 1989). Workload can be considered as a cognitive construct, a latent variable or may be as mediating variable (Gopher & Donchin, 1986, p. 41-4), exhibiting the interaction of cognitive demands applied on employees by the nature of work they perform. The reaction to the workload depends upon the mental capability of a person and the context of situation. Workload can be an outcome of the intensity in many different work related demands, and hard to cope up such demands simultaneously (Cain, 2007). Workload is a construct that cannot be observed directly, but can be inferred from the behaviors or evaluation of physiological and psychological symptoms (Casali & Wierwille, 1984). To be very precise the academic and psychological research is still in dearth in well acknowledged definition of workload. The existence of workload stress is normally determined through behavioral and psychological symptoms reflected among the employees in the working environment. The heavy workload coupled with sensitive nature of work is an open invitation to the stress. The job of bankers is such arena, where chances of stress are always there due to nature of job, particularly among women bankers, more specifically in Pakistani context.

H1: Workload in banking job causes the work-related stress among female bankers.

Working Relation and Stress

Work related stress can influence an employee's behavior either negatively or positively. Spielberger (1979) noted that work-related stress is one of the most influential factor affecting performance, because individual has direct exposure to the stress (p. 4). Coping with stress has been observed as efficient and effective way to mitigate the negative outcomes (Krohe, 1999). Krohe further states that managers in decision making positions often feel it essential to fabricate stressful working conditions to develop the best performance habits among their subordinates. However such exercises do not pay favorably all the time, stress can turn into poor productivity, obstacle to

innovation, and job satisfaction. The stress as an outcome of bullying attitude may lead to commission of counter work practices (Schlesinger & Eugene, 1980).

H2: Working Relation is significant predictor of Work-related Stress among female bankers.

Work-related Stress and Job Satisfaction

Generally it is an endorsed reality that people in the working environment where they are mandated to deal with issues of others, such as teaching, law enforcement, hospitality management, health care and banking are vulnerable to work related stress (Finn & Tomz, 1998). The existence of stress to some extent is obvious and one cannot get rid of it completely (Ortega, Brenner, & Leather, 2007). The effect of such stress can be moderated through various training and psychological sessions. However the employees suffering from prolonged exposure to stress, and not treated proficiently, can be catastrophic both for organization and employees in terms of compromised contribution in organizational objectives (Maslach, Schaufeli, & Leiter, 2001). In the working environment numerous factors can cause the stress and their influence of various employee outcomes. Such as job satisfaction, one of the most heavily studied employee behavior in management research (Rahman, Gupta, & Moudud-Ul-Huq, 2012). Job satisfaction has been defined as the state of feelings for the job a person is doing has been typically termed as job satisfaction (Balzer, et al., 1997 ; Spector, 1997). Ashraf et al. (2014), and Saleem et al. (2013) have documented that it is an affirmative exhibition regarding the nature of job an employee performs. It reflects an higher order job contentment, constructive feelings for the work. More simply a discontent employee will behave negatively while on job. Thus the satisfaction with the job is exhibited in an amount of dedication and commitment towards the achievement of organizational productivity. The organizations are required to develop conducive environment for the employees, so that affirmative attitude may be nurtured.

Negative job satisfaction can be an outcome of job stress (Stamps, 1998; Cooper, Rout, & Faragher, 1989). Stress can be an outcome of something and can be translated into dissatisfaction. Vinokur-Kaplan (1991) noted dissatisfaction with salary was significant feature among social work volunteers. The level of job satisfaction among working women engaged in different organizations has been studied as influenced by salaries, recognition of services rendered by them, organizational climate (Hossain & Rahman, 1995). The female bankers while on the job perceive high level of stress, and higher level of job satisfaction can minimize the propensity to quit the job (Hossain, 1997). On the basis of literary evidence we have developed following hypothesis:

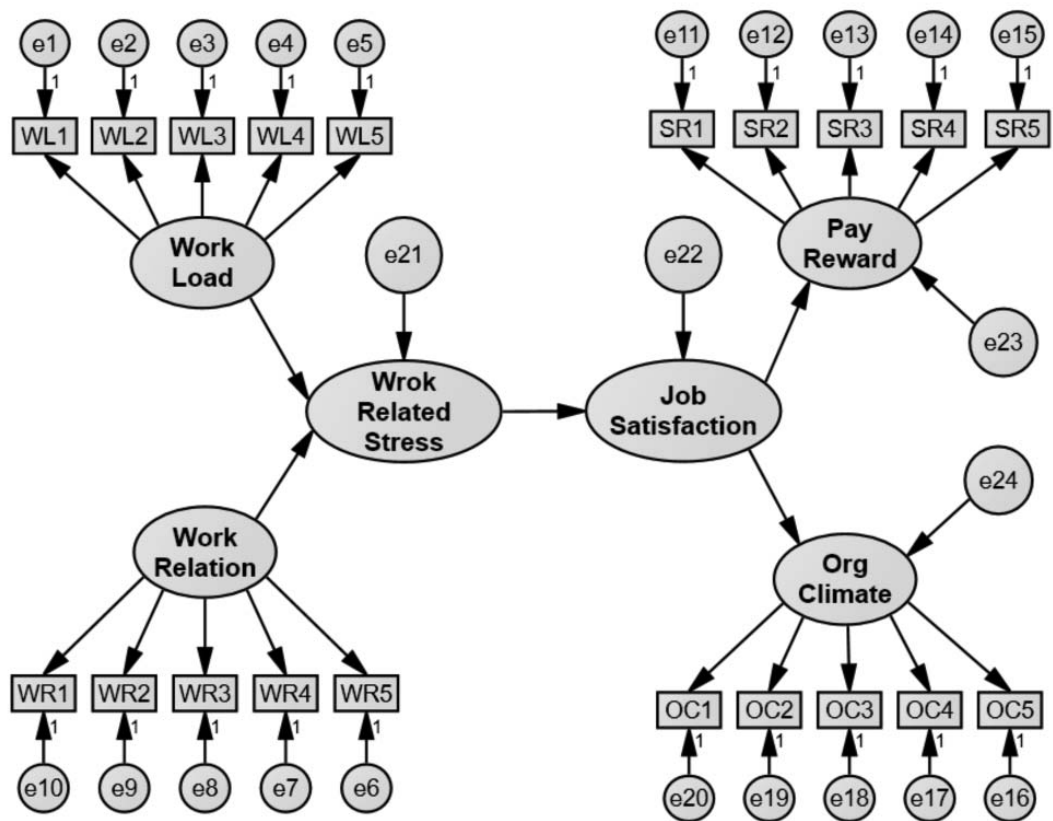
H3: Work-related stress has significant influence on the level of job satisfaction.

H4: there is significant relationship between pay and level of job satisfaction.

H5: there is significant association between organizational climate and level of job satisfaction.

Conceptual Frame Work

Figure 1
Conceptual Model



Nature and Type of Research

As this study is intended to analyze the effect work related stress on satisfaction with the job among female bankers, hence the nature of the study is of cause and effect therefore this study is causal in nature. However, quantitative methods are applied for research.

Data Sources

This research is survey based; therefore primary data collection approach has been used to gather the data required for this study. Close ended questionnaire was used to collect response.

Sample

The subjects of study were 345 female bankers working in two private owned bank branches located in Karachi, Pakistan. The sample size was constrained by the choice of branches having more than 5 female bankers and headed by the male branch managers. The convenient sampling method was used to identify respondent for this study.

Measures

Work related stress was measured through two constructs namely work load and working relations. Whereas the job satisfaction was measured through two identified constructs namely pay and organizational climate.

(1) Work load

Workload as hypothetical construct is often described as gap between person's existing resources and the demands of task (Young & Stanton, 2005; Bowers & Jentsch, 2005). In order to gather response the NASA-TLX high workload scale with some modification was used. The scale was ordered in five-point likert type, 1=being least level of agreement and 5=being most level of agreement.

(2) Work Relation

The congenial working relation ushers the environment of team-work, under which everyone feel sense of responsibility being part and parcel of the relation. The state of working relation as hypothetical construct has been measured by using self-developed scale (tested through pilot study) on 5-point likert type.

(3) Pay

Pay satisfaction as hypothetical construct was measured by placing 5 items before respondents on 5-point likert scale. These items were self-developed and pre tested before administering to the respondents.

(4) Organizational Climate

Organizational climate refers to a set of attributes, which can be presumed within an organizational setting (Kaczka & Kirk, 1967). In order to measure the perception of respondents about the organizational climate, the questionnaire developed by Adenike (2011) regarding organizational climate were used. The items were chosen and modified to suit the purpose of the study.

Participants and Sample Characteristics

Table No 1 shows the demographic characteristics of the respondents for this study. All the respondents were female; therefore the gender characteristics have not been incorporated. The greater chunk of the respondents was of 24 to 30 years of age constituted 55 percent of total respondents. The bankers had at least 5 years of job experience been requested to participate in the survey. As the young bankers were in majority in showing their consent to participate in the survey, therefore 60.0 percent were the bankers had an experience bracket of 5 to 10 years.

Table 1
Descriptive Statistics

Demographic		Frequency	Percent
Age	24 to 30	190	55.0
	31to40	90	26.0
	41and above	65	19.0
Job exp	5to10	207	60.0
	11to20	138	40.0
Designation	OG I	45	13.0
	OG II	121	35.0
	OGIII	179	52.0
Merit status	Single	90	26.0
	Married	255	74.0
Education	Masters	226	65.5
	Graduate	119	34.5

Results and Interpretations

Correlation Analysis and Reliability Test

The table No 2 shows the strength of relationship between variables of interest. Strong and significant correlation is exhibited through the execution of Pearson correlation. Chronbach's alpha reliability to test the reliability of scale was conducted. The result for the test is shown table 2. The test was pioneered by (Cronbach, 1951). It aimed at to measure the internal consistency among the items of the scale. The alpha reliability is reported into parentheses shown in table 2.

Table 2
Correlations

	Job Satisfaction	Work load	Work Relation	Pay	Org: Climate
Job Satisfaction	1				
Work load	.458**	(85.3)			
Work Relation	.691**	.499**	(78.8)		
Pay	.891**	.411**	.684**	(79.4)	
Org: Climate	.891**	.404**	.547**	.587**	(79.3)

Structural Model Results

The conceptual model in figure 1 has been analyzed using AMOS 20 and got the results shown in figure 2. The proposed model was tested on the sample (n=345). The results shows that Chi-Square was 90.18, p=.065; GFI .950; AGFI, .862 indicates the model is fit enough results are shown in Table 3. The chi-square is required to be insignificant; in our case it is insignificant, however said outcome is sample sensitive. The more the sample sizes higher the significance (Newsom, 2012). Therefore we have included other fit indices as well.

Table 3
Fit Indices

Model		Absolute Fit Indices			Incremental Fit	Parsimonious Fit
		χ^2	GFI	RMSEA	TLI	AGFI
1	72	90.18	.950	.048	.964	.862

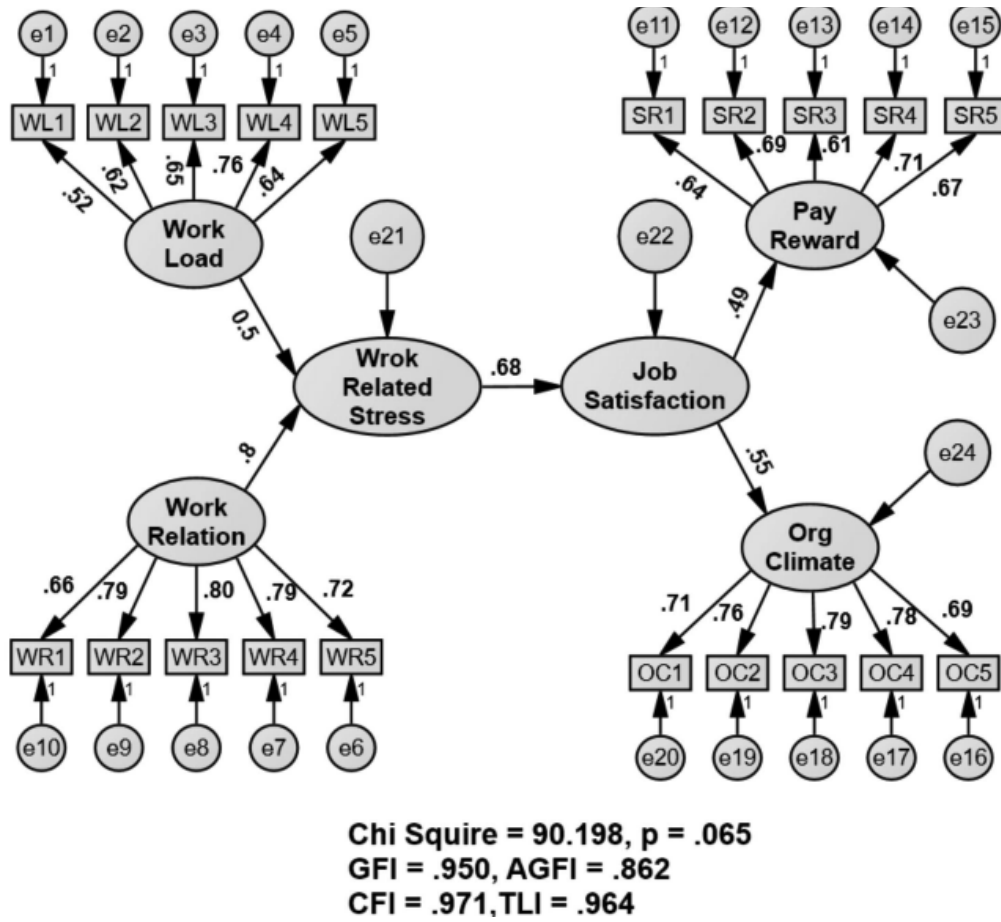


Figure 2: Shows the Standardized Path Coefficients and factor loadings

This study has investigated five hypotheses. The results of hypotheses are shown in table 5, the coefficients and t-values are given. All the given t-values are over 1.96 and significant positive influence is shown through regression estimates; thus all the hypotheses could be retained as for as this study is concerned.

Table 4
Estimates for structural parameters

Model	Parameter	Estimate	t-value	P-Values	Hypotheses
H ₁	Work load → Work related stress	.60	7.14	0.05	Accepted
H ₂	Work relation → Work related Stress	.80	9.19	0.01	Accepted
H ₃	Work Related Stress → Job Satisfaction	.68	8.82	0.01	Accepted
H ₄	Job Satisfaction → Pay and Reward	.49	3.60	0.05	Accepted
H ₅	Job Satisfaction → Organizational Climate	.55	4.16	0.05	Accepted

Discussion and Findings

The findings of this study offers a well established supports for hypotheses about the work related stress among female bankers (Das, 2016) as the results agreeable to analysis using Job Demand Resource Model (Bakker & Demerouti, 2007; Bakker, Nachreiner, & Schaufeli, 2001). Higher job demands, struggling working relation causes the work relatd stress. However surprisingly work related stress is translated into higher order job satisfaction level. The novel contribution of this study is stress can bring positive attitude among people in working environemnt. The employees in the working environment are always prone to the stress in general and in baking sector in particular. The female employees due to their sensitivity in nature are always caught by work related stress and eventually low level of job satisfaction. Thus rate of turnover in baking in Pakistan is increasing day by day. The finding of this study is in congruence of the conclusion documented by Gupta (2015). However her focus was Indian female bankers. Thus this study is unique contribution in management literature.

Conclusion

The objective of this study was to determine the causal relationship between work related stress and job satisfaction among female bankers. The rationale choosing this issue to investigate was state of sensitivity among female employees; when these sensitive employees work under stressed environment like banking sector is studied, it was anticipated the interesting findings. In this regard work related stress was studied as independent variable and job satisfaction as dependent variable. Data was collected from female bankers, performing in several banks in Karachi, Pakistan. Close ended questionnaire was used to collect the data from respondents identified through convinient

sampling technique. Structural Equation modeling using AMOS 20 was conducted and the results interpreted. The steps of structural equation modeling from model specification to model modification and fitness were performed. Through the confirmatory factor analysis (CFA) the factor having loading less than .40 were eliminated. The absolute, incremental and parsimonious fit indices has been reported to check the fitness of the model.

Limitations

Like all sort of studies, this research has also some limitations. The foremost of them was the time of time. The 2nd most was the reluctant attitude of the respondents while filling the questionnaire. 3rd this study is limited to the private banks only, thus the stress level among the female bankers is measured. The study might return unique findings, if it had been broader in scope towards other fields of inquiry. Moreover the nature of this study is quantitative, therefore the limitations of quantitative research is also inheritance to the study.

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