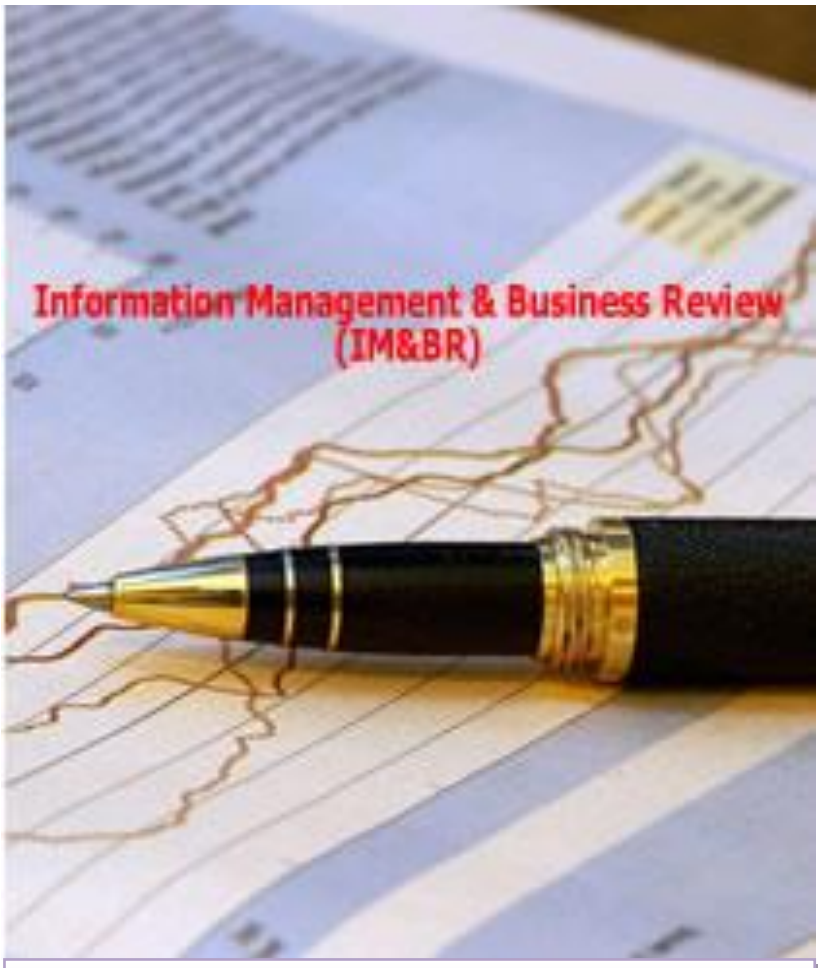


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Editorial

Information Management and Business Review (IMBR) provides a unique platform to scholars around the world to share their knowledge and publish research work in the fields of information management, business, management and related disciplines. The work submitted for publication consideration in IMBR should address empirical and theoretical developments in the subjects related to scope of the journal in particular and allied theories and practices in general. Scope of IMBR includes: subjects of finance, accounting, auditing, cost & management accounting, financial psychology, financial literacy, marketing, information management, human resource management, knowledge management, innovation, change management, enterprise management, e-commerce and information system. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to IMBR. It is IMBR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of IMBR comprises of papers of scholars from Malaysia, Indonesia, Pakistan, Ghana, Turkey and India. Puerto Rican debt crisis, learning organization & work engagement, financial management practices & SMEs profitability, network level needed in determining organizational structure and awareness & use of serials are some of the major practices and concepts examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity of the purpose. Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

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PAPERS

Where Credit is due: on the Puerto Rican Debt Crisis

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Abstract: This paper provides a comprehensive breakdown of the ongoing economic crisis in the Commonwealth of Puerto Rico. It explores the backdrop of the crisis by analyzing Puerto Rico's relationship with the U.S., macroeconomic indicators and pertinent legislations. It's entirely unique contribution is the analysis of the newly introduced act- PROMESA, which enables Puerto Rico to restructure its debt. We have provided an explanation of the important sections of this legislation which govern the debt negotiation process. The PROMESA act has been extended to apply to other unincorporated territories of the United States as well should they run into arrears, which broadens the scope of this paper. We have extended the findings of pre-existing body of work on sovereign debt restructuring hurdles and explained how PROMESA addresses them. We have also used previous works to suggest measures to expedite Puerto Rico's debt restructuring process with creditors. This paper could also serve as a handbook for creditors looking to navigate through the post-PROMESA debt restructuring process.

Keywords: *PROMESA, Debt Restructuring*

1. Introduction

The Puerto Rican Debt Crisis is an ongoing financial crisis related to the amount of debt owed by the Government of Puerto Rico. It has already defaulted on portions of its debt including millions on May 2, 2016. On July 1, it defaulted on an additional $2 billion including $800 million of constitutionally backed General Obligation debt. The then Governor of Puerto Rico, Alejandro García Padilla issued a debt moratorium halting payments on all debt obligations which has resulted in litigations and the investment done is at risk. The President of United States of America, at the end of June 2016 signed into law the Puerto Rico Oversight, Management and Economic Stability Act (PROMESA) which seeks to address the lack of legal framework available to the territory and extends its net to all the territories of the US, should they ever default. The move to install a control board comes after US Supreme Court decision on a case, Puerto Rico vs Franklin California Tax-Free Trust, which found a previous attempt by Puerto Rico to restructure its debt, unconstitutional. This decision ended any illusion Puerto Rico had of economic sovereignty. Left with no alternative, the Puerto Rico will have to make-do with the legal framework now provided by the United States Government. The legal framework, the PROMESA bill creates a seven-member panel and is tasked with bringing more than $70 billion public debt under control. The board also has broad sweeping powers to reconfigure Puerto Rico's financial and economic policy. The board will be able to facilitate binding negotiations with creditors and, if needed, a court-supervised restructuring. Amidst all this, the recent Zika outbreak in Puerto Rico has exacerbated the bundle of responsibilities on the Puerto Rican Government. Add that with the galvanizing political movement that has called the board, "Colonial Outrage". A popular slogan is on the lips of protestors and activists - "CARAJO LA JUNTA". A delicate situation has arisen on the island. This research paper seeks to shed light on the new legal framework –Oversight Board established under the PROMESA bill and the role that board members must play in helping the island out of the financial crisis.

An Overview of the Puerto Rican Economy and Macroeconomic Indicators: Like most other developing economies Puerto Rico's major economic sector was agriculture in the early 20th century. The key economic drivers today are manufacturing; ensued by the service industry i.e. finance, insurance, real estate, and tourism. The World Bank classifies Puerto Rican economy as a high income economy. Puerto Rico's economy remains closely tied to that of the United States. This is because Puerto Rico is an *unincorporated* territory of the United States, decided after the Supreme Court's Insular Cases that defined the relationship as "A territory appurtenant and belonging to the United States, but not a part of the United States within revenue clauses of the Constitution". Broadly speaking, the territorial economy is influenced by three things.

Firstly, and most importantly is the legislation pertaining to the island, be it monetary or fiscal policy directed by the Congress: The Jones Act made all inhabitants of the territory a United States citizen. The key

features of this Act include establishment of bill of rights, power to the residents to elect a Governor for a term of four years and exempting Puerto Rican bonds from federal taxes, state taxes as well as local taxes. We shall see in the later part of the paper how this piece of legislation has shaped Puerto Rican economy and created hurdles albeit unwittingly. The Merchant Marine Act created problems for the island as the ships had to first go through U.S. ports before heading to Puerto Rico. This resulted in inflated costs of goods brought to the island, consequently affecting tourism and the island ability to compete with other Caribbean islands. Congress amended the Internal Revenue Code under which Sec. 931 was replaced with sec. 936. Its aim was to promote economic growth on the island by giving companies tax exemptions thereby incentivizing corporations to invest and manufacture in Puerto Rico. Axiomatically, Puerto Rico experienced dramatic growth from 1950s leading up to the mid '70s. Economic indices indicate a growth rate comparable to the well-known, pronounced growth of East Asia. The massive increase in GDP per worker in 1980 made Puerto Rico one of the "world's most developed Latin societies" (Velez-Hagan, 2015). Section 936 became unpopular in the early 1990's as many saw this as a way for large corporations to avoid paying taxes. Section 936 was then phased out, over a ten-year period, fully repealed in 2006. The subsequent elimination of this tax exemption also contributed and co-relates to a slump in the territorial economy.

Secondly, the economic shocks felt by the mainland had direct and perhaps greater effect on Puerto Rican economy: The 1973-75 recessions in the mainland due Oil Crisis and the 1980's energy crisis's effects lasted longer on the island than compared to the mainland. According to a Banco Bilbao Vizcaya Argentaria (BBVA) report, it costs Puerto Rico an estimated $750 million for a mere $10 increase per barrel of oil imported, decreasing the Puerto Rican GDP. "According to the American Enterprise Institute, a $10 per barrel increase also eats away a half percentage point off the global gross domestic product (GDP)" (McPhaul, 2005).The economic boom in the 1990's helped the economy to recover but at the turn of millennium the island suffered a decade-long contraction, relying for the major part, on transfer payments and other public assistance from the U.S. It is clear from *Figure 1* that the economic shocks felt by the mainland were in turn felt by the island. This makes it imperative to remark that the "free association" that Puerto Rico has with United States leaves to island's economy vulnerable to the mainland's economy. It is clear from above that the mainland economy and the policies implemented by them played a role in boosting growth in Puerto Rico up to the top and the economic shocks received by the mainland were in turn felt by them.

Lastly, the internal policies and politics have played a crucial role in shaping the Puerto Rican Economy: The Government has spent considerable amount of their capital on building infrastructure, waterworks and roadways. These development projects have lacked proper estimates and the Government has routinely taken short term loans to cover the costs that shot out from the misleading estimates. In an attempt to jumpstart the economy, which began contracting earnestly back in 2006, the government went on a spending spree to build new infrastructure that would create new jobs, increase connectivity that would lead to greater labor mobility. However, this ambitious drive lacked accountability in general and inefficient use of capital has resulted in a massive debt that the government cannot make interest payments without cutting key government services like healthcare, education and public safety. "Garcia Padilla administration's ties to political fundraisers haven't truly broken into the mainstream media. Hernandez, along with nine other Puerto Rican businessmen and officials, was arrested in December 2015 as part of an ongoing FBI corruption investigation into Padilla's government" (Mazzella, 2016). These and other such widespread allegations of graft and corruption, over decades, have inflamed the already volatile economic conditions on the island.

The doubling of oil prices from 2005-12 inflated their cost for power generation. The increased cost of import, amounting to 3 percent of GNP increase in oil bill could have been used by the Government to support its local economy (*Figure 2*). Another factor to the debt crisis in Puerto Rico is that of the real estate crash in 2013. Due to the decade long recession and the heavy debt on the government, few want to buy a house in the island. Since Puerto Ricans are United States citizens, many are simply packing up and moving to mainland (*Figure 3*). Puerto Rico ranks 2nd for homes in foreclosure in the United States. This trend is likely to continue and more homes will enter foreclosure process seeing how people are choosing to leave the island and move to mainland. The Federal Minimum Wage is applicable to the island making it mandatory to pay the federal minimum wage of $7.25 an hour in spite of the island's economy being vastly different from mainland's economy. As shown in the *Figure 4*, the Federal Policy of Labor is making people in Puerto Rico unemployable

– a result visible from the territories' unemployment rate is 12.4 percent that is twice more than the 5.5 percent of the mainland.

Higher minimum wages increases cost of hiring for businesses thereby reducing employment. Puerto Rico, which has the ratio of minimum wage to the median wage of 77 percent - 24 percentage points higher than Florida which has the highest minimum wage in United States of America. The local regulations which relate to overtime, paid vacation are costlier than the mainland. Fewer jobs for the people mean fewer taxpayers and more dependency on welfare and public services. These contribute to additional government spending (*Figure 5*).Outmigration is on the rise due shrinking job opportunities. The Planning Board's projection of population till 2020 continues to fall at negative 1 percent per year. This data, as shown in *Figure 6*, does not take into account additional economic problems that may occur during/after debt restructuring. Apart from the decrease in demand from the island, the labor force will continue to shrink unless major initiatives are undertaken to curb this activity. The energy costs have fallen with the falling oil prices but cost per hour kilowatt is several times higher than that of the mainland. This raises the cost of locally produced goods and subsequently growth of economic sectors. Due to the higher cost of goods and services, the island finds it hard to compete with other Caribbean islands. The public enterprise (PREPA) uses old technologies and is inefficient. Cost of energy and water supply problems have flared up, discouraging numerous companies and industries from moving their operations in Puerto Rico.

2. The distinctive Puerto Rican Problem

Before we dive into a discussion regarding the possible ways of debt relief and restructuring, it is imperative that we take a look at the issues which make solving the Puerto Rican debt crisis a unique problem. The island of Puerto Rico has been a U.S. Territory since 1898 and Puerto Ricans have become U.S. citizens since 1917. Politically, Puerto Rico is an unincorporated territory of the United States, which means that it does not enjoy the privileges of being a state. This has historically divided the people of the island and been a subject of four referendums so far, the latest of which took place on November 6, 2012, which resulted in a slender majority of the populace asking for a complete statehood, some asking for sovereignty and the others wishing to stick with the status quo. The most important economic implication of the "unincorporated territory" status is the unavailability of the option to resort to the Chapter 9 bankruptcy code. "Chapter 9 is a bankruptcy proceeding that provides financially distressed municipalities with protection from creditors by creating a plan between the municipality and its creditors to resolve the outstanding debt. Municipalities include cities, counties, townships and school districts" ("Investopedia", n.d.).

Basically Chapter 9 is the provision to restructure the debt but since territories are not included in the Chapter 9's definition of municipalities, this option remains unavailable to Puerto Rico. The woes of the Commonwealth being unable to restructure its debt is further compounded by the following clause under Article VI (General Provisions) Section 8 of the Puerto Rican Constitution: "In case the available revenues including surplus for any fiscal year are insufficient to meet the appropriations made for that year, interest on the public debt and amortization thereof shall first be paid, and other disbursements shall thereafter be made in accordance with the order of priorities established by law." Thus the General Obligation bonds issued by Puerto Rico take precedence in terms of getting paid first before any other government expenditures including other bonds. This is ensured by the "clawback provision" which means redirecting revenues to pay for the bonds guaranteed by the government of Puerto Rico. The clawback provision came to attention especially when, in December 2015, "Governor Alejandro Garcia Padilla signed an executive order to permit the redirection of revenue budgeted for highway and convention center bonds and other agencies to pay for debt issued or guaranteed by the commonwealth" (Kaske, 2015). However temporary fixes like these served as nothing more than ominous indicators of the inevitable financial peril that was looming large over the island.

To cut down on public spending hundreds of schools have been closed down in the past half-decade making it increasingly difficult for students to find a school nearby while some bus companies have declined service to students for lack of finances. Hospitals and emergency wards are also suffering from lack of funds resulting into power outages. "At least 629 cases of Zika infection have been confirmed, and it is projected that up to 20 percent of the Puerto Rican population could become infected this year, according to data from the Centers

for Disease Control and Prevention" (Calmes, 2016). It is beyond the scope of this paper to discuss the Applied Ethics and philosophical implications of deciding a debt hierarchy to determine if it is more moral, for a state under duress, to pay a General Obligation bond holder or say pension benefits of a retired state-employee. Although even from a socio-political standpoint it seems difficult to reason how severe austerity measures, ones suggested by the GO bond holders, would result in a long term solution without social unrest.

Deciphering PROMESA: The Puerto Rico Oversight, Management and Economic Stability Act (Hereafter referred to as PROMESA) at first glance has a whiff of being more of a conciliatory document for several special interest groups, creditors unions and the concerned mainland American citizens over having to sponsor a bailout at the taxpayer's expense. A more careful reading of the bill reveals a lot of new features of interest and suggests that the drafters of the legislation have learnt their lessons from the previously bankrupt US Municipalities and also from sovereign debt negotiations. While the bill enjoyed majority bipartisan support in the House of Representatives, where it was introduced, several Democrats and leaders from Puerto Rico expressed their reservations raising the specter of colonialism but begrudgingly supported the bill. Puerto Rico has tried and exhausted every legal option available to restructure its debt and in the wake of losing an important Supreme Court decision on June 13, 2016 over the legality of Recovery Act, which was described by Justice Sotomayor as "the only existing legal option for Puerto Rico to restructure debts", PROMESA seems to be the only resort. The cornerstone of the PROMESA act is the Oversight Board. The Oversight Board has exclusive control to ensure that the Fiscal Plans are enacted and enforced, and that all necessary reforms are undertaken to put the island on a path to access credit markets.

Let's take a look at some of the important sections in this piece of legislation: Under the provisions for membership laid out in Title 1, the Oversight Board shall consist of 7 members. These members shall be appointed by the President from among the nominees provided by various leaders of Senate and House of Representatives as specified. One of the 7 members shall be either the Governor of Puerto Rico or his designee and will act as an ex officio member with no voting rights. The unavailability of voting rights to the island's representative might be to ensure that the Oversight Board remains neutral in coming up with a plan which is in 'the best interest of the creditors'. The voting members of the Board amongst themselves shall designate one member to act as Chair. After this the Oversight Board shall formulate bylaws, rules and procedures governing it under this act. The Oversight Board will have an Executive Director appointed by the chair. The Executive Director and the personnel hired by him shall be paid for their services while the members of the Oversight Board will only be compensated for the expenses incurred while serving. It is interesting to note that an island battling with economic crisis has a Board imposed on it, the expenses of which will be borne by the island's already heavily indebted Treasury (Hacienda). It is also apparent that instating an Oversight Board which performs the same task that a similarly empowered Puerto Rican Government would have done is redundant. However, an obvious positive impact of putting a Federal Oversight Board in charge would be a boost in the creditor confidence as the Board is tasked with passing balanced Fiscal Plans while also ensuring the best possible outcome for the creditors.

Section 210. It is imperative to note from the onset that an act drafted and passed by the United States House of Representatives, Senate and the President of United States, clearly and unequivocally, under Sec. 210, distances the US from pledging full faith and credit for "the of any principal of or interest on any bond, note, or other obligation issued by the territory or territorial instrumentality". (PROMESA of 2016). While Puerto Rico's economic future is in the hands of a Board, constituted by the United States and vested with sweeping powers, the responsibility clearly doesn't fall at the doorstep of the United States Federal Government.

Section 104(e). One of the clauses, conspicuous by its presence not in a limiting manner but as an enabler is a glaring loophole so obvious it is almost euphemistic to call it one. The Section 104 - Powers of Oversight Board, allows its members "to accept, use, and dispose of gifts, bequests, or devises of services or property, both real and personal, for the purpose of aiding or facilitating the work of the Oversight Board". (PROMESA of 2016). It is difficult to comprehend why the drafters of the legislation would feel the need to allow for this provision as it is not too difficult to see a potential conflict of interest arising out of this. It would seem worth noting at this juncture that the members of the Oversight Board only get reimbursed for their expenses and are not paid for their services.

Section 405(b) (1)-Automatic Stay upon Enactment. This section ensures that upon the enactment of PROMESA the creditors cannot seek injunctive action against Puerto Rico or its instrumentalities. This will provide some major breathing room for the commonwealth and the Oversight Board as it seeks to restructure the island's debt. The automatic stay has already undergone its first test as Plaintiffs Brigade Leveraged Capital Structures Ltd. and two others approached the District Court of Puerto Rico to revoke the stay under Sec.405(e) and to challenge the constitutionality of the Moratorium Act but were shot down by the presiding judge who upheld the stay. This stay remains in effect until February 15, 2017 but could be extended by the Oversight Board's discretion under Sec.405 (d).

Section 405(j) - No Default Under Existing Contracts. This states that as long as the stay applies, no bearer of a liability claim can seek remedy based on contractual implication or applicable law. This closes another door for the creditors and forces them to come to the table for negotiations. "The term remedy here has a broader perspective which includes the right to- setoff, apply or appropriate funds, seek the appointment of a custodian (as such term is defined in section 101(11) of 9 title 11, United States Code), seek to raise rates or exercise control over property of the Government of Puerto Rico" (PROMESA of 2016).

Section 407(a) Protection from Inter-Debtor Transfers. The said section provides some comfort to the creditors and also discourages the kind of avoidance behavior that got the island into the current economic debt in the first place. Under Sec. 407(b) the creditor is given the right to enforce action via the District Court against any state instrumentalities, in case of violation, after the stay period is over.

Section 405(l). This assures the creditors that as long as the Oversight Board deems "it is feasible the Government of Puerto Rico shall make interest payments on outstanding indebtedness when such payments become due during the length of the stay" (PROMESA of 2016). The powers of the District Court have also been limited under PROMESA. Under Sec. 305 the court cannot, without the Oversight Board's consent, "interfere with- (1) any of the political or governmental powers of the debtor; (2) any of the property or revenues of the debt; or (3) the use or enjoyment by the debtor of any income-producing property". It is apparent that the Oversight Board has a Herculean task in front of it by the fact that under Title 2, it has the responsibility to both- provide adequate funding for public pension systems and respect the relative lawful priorities or lawful liens, as may be applicable, in the constitution. The Oversight Board is seeking to "create a firewall between the constitutionally protected creditor hierarchy and pensions in the development of Fiscal Plans".

Section 104(i) Voluntary Agreement Certification. Under this section, the territory or the covered instrumentality can enter a voluntary accord with the bearers of its bond claims to restructure its bond claims. This certification depends on whether a Fiscal Plan has been validated by that point in time or not. In case a Fiscal Plan has been certified then the Oversight Board has to take into account if the plan provides for a sustainable debt for the territory or its covered instrumentality. In case a Fiscal Plan has not been certified then it will be the Oversight Board's sole discretion to certify if the plan provides for sustainable debt level of debt. Notwithstanding the above conditions, certification will also be provided "if an applicable Fiscal Plan has not yet been certified and the voluntary agreement is limited solely to an extension of applicable principal maturities and interest on Bonds issued by Puerto Rico or territorial instrumentality" (PROMESA of 2016). This applies, for a time frame of up to one year on the Bond Claims during which interest won't be paid on claims on which a voluntary agreement is reached.

Section 601 Creditor Collective Action. This section entails the Oversight Board to consult the issuer and separate the bonds into pools as follows:

- "Not less than one Secured Pool for which a revenue stream has been pledged and separate pools for bonds of different priorities" (PROMESA of 2016). For the bonds which have no revenue stream pledged a separate pool shall be made.
- "The Administrative Supervisor shall not place into separate Pools Bonds of the same Issuer that have identical rights in security or priority" (PROMESA of 2016).
- "For each Issuer that has issued multiple Bonds, for at least some of which a guarantee of repayment has been provided by the Territory Government Issuer, separate Pools shall be established for such guaranteed and non-guaranteed Bonds"(PROMESA of 2016).

Apart from the certification of the Oversight Board as discussed above, a modification also needs to be submitted to the holders of the respective debt instruments by specified channels of communication. The qualifying modification must be consented to by the majority of the holders of outstanding principal amount in the pool and voted affirmative by at least 2/3rd of the Principal amount that is outstanding of the Outstanding Bonds in each Pool. If the modification passes successfully through these steps, the qualifying modification shall be presented to the United States District Court. The Court has the power to nullify the modification "if and only if the district court determines that such Modification is manifestly inconsistent with this section" (PROMESA of 2016). Once the modification receives the court's nod on having followed all the steps listed in the Section, the modification becomes binding even on those creditors that have expressed dissent. The binding nature of the modification ensures that there is no room for creditor holdout. There can be no further litigations by dissenting creditors once a qualified modification is passed by the specified majority of the creditor pool, consented by the territory, certified by the Oversight Board, and approved by the judiciary. This also helps speed up the negotiations required to restructure the debt.

Section 602. Perhaps to quell the debate around international agencies like IMF potentially playing some role in Puerto Rico's debt crisis on account of it being a territory, the penultimate Section 602 of the legislation makes it clear that "Federal, State, or territorial laws of the United States, as applicable, shall govern and be applied without regard or reference to any law of any international or foreign jurisdiction." (PROMESA of 2016).

Negotiations with Creditors in post PROMESA world: Renegotiating debt can sometimes be very prolonged lasting for more than 10 years. It is important to understand various issues that prolong the renegotiation process. The economy of Puerto Rico, already down to its knees does not have the time for lengthy and protracted negotiations. Time is on Puerto Rico's side as the debt restructurings now, on average take significantly less time than back in 1980's and 1990's (31 months) vs "Post Brady Era" (17 months). Argentina's bond instrument re-issuing (which included global investors) in 2005 and Serbia's 2004 exchange of bank debt are the only exceptions that took more than 3 years to negotiate. Let us take a look at hurdles in restructuring process listed and explained by Das, Papaioannou, and Trebesch (2012).

3. Hurdles in Restructuring Process

Creditor coordination failures, litigation, and holdouts: "Problem of creditor holdouts and litigation is widely seen as the main reason for delayed and inefficient debt restructurings. Creditor holdout scenario is when a creditor refuses to participate in a restructuring offer, so as to enforce better terms later" (Das, Papaioannou, and Trebesch, 2012, p.28).This is seen a major obstacle in creditor coordination failure, "mainly due to the shift from bank to bond financing in emerging markets. Intuitively, large bondholder groups may find it harder to coordinate and agree on a deal, compared to a small group" (Das, Papaioannou, and Trebesch, 2012, p.28).However, with the Oversight Board overseeing the debt-restructuring process, the Puerto Rican Government should make use of the Board Members' expertise so that the problem of coordination is solved. Although Title 6 of the PROMESA takes care of litigations that can happen after a restructuring deal is negotiated, provided that the set procedure of debt-negotiation was followed, one needs to be alert nonetheless.

Debtor policies and political risk: "In addition to creditor behavior, it is well known that debtor country policies, or in this case territorial policies, lack of transparency and insufficient communication with creditors, can contribute to failed or delayed restructuring processes" (Das, Papaioannou, and Trebesch, 2012, p.29). This issue is well addressed within PROMESA. For instance, Under Title 6 Sec. 601, there is provision for an Information Agent for each creditor pool for effective communication. Title 6 Sec. 601 Subsection (D), also establishes well defined creditor pools, ensuring a concrete structure to enable creditor-pool specific plans and effective communication. The legally binding nature of these modifications ensures maximum creditor participation during the negotiation stages. In addition to this, the Oversight Board demands from the Puerto Rican Government to have certified fiscal and budgetary plans. If well executed, this could cut the time it takes to negotiate a new deal significantly. "All available evidence indicates that information sharing and closes consultations with banks and bondholders go hand in-hand with quick and successful restructuring. A frequent issue of disagreement is the disclosure of reserve amounts or of details

on prospective exchange offers. Creditors can, in Puerto Rico's case ask for relevant information from the Oversight Board" (Das, Papaioannou, and Trebesch, 2012, p.29).

The disputes on non-disclosed debt buyback programs cannot happen here as all the negotiations have to follow a set procedure according to section 601 and the plan has to be certified by the Oversight Board which then proceeds to court to make it legally binding. These checks and balances ensure to almost utmost certainty that creditors will not have to deal with non-cooperation from the debtors. While the task of seeing that Debtor policies do not interfere with the negotiations process falls on both the Oversight Board and the Puerto Rican Government, the onus of maintaining political stability falls squarely on the territorial government. Political instability and political economy problems play a role in increasing the time it takes to negotiate a restructuring. Elections, conflicts, widespread riots and general strikes, or the resignation of key government members can all cause delays in implementing a debt restructuring. Puerto Rico gubernatorial elections which were held on November 8, 2016 led to the election of Ricardo Rossello, a pro-statehood candidate as the Governor of Puerto Rico. The political parties have a crucial role to play in maintaining the political stability of the region. The winning party must undertake conscientious policy planning to correct the deep rooted structural problems that lie in their economy rather than inciting friction and spouting rhetoric.

Retail Investors Vs Institutional Investors: While designing an exchange offer, the Government of Puerto Rico should keep in mind the type of investors they are dealing with. A range of exchange options allows investors to "choose among different new instruments when tendering their old claims, thus accounting for differing preferences across creditors. Retail investors tend to prefer new bonds with no face value reduction and are more willing to accept long maturity and low coupons" (Das, Papaioannou, and Trebesch, 2012, p.23) Institutional investors prefer to go for bonds with a reduction in principal with a combination of shorter maturities and higher coupons. Accordingly, the government should take into account the type of investors that have invested in their bonds and design an exchange offer accordingly.

Debt-sustainability: While debt-negotiations in progress, the debtor in order to achieve high participation rate, contain "carrot" features or "sweeteners" "that generate incentives for participation. Sweeteners can take the form of upfront cash repayments, advantageous legal features of the new bonds, or add-ons to the new instruments which may include higher interest rates"(Das, Papaioannou, and Trebesch, 2012, p.22) The Government needs to thoroughly assess the feasibility of providing high interest rates on the new bonds and "how much". This will include a careful scrutiny of revenue streams and the amount of liabilities. A step up in interest payments may bring the creditors on board the negotiations and successful restructuring would mark the end of crisis episode because the exchange of old into new debt instruments puts the country back on the path of debt sustainability."However, restructurings do not always put an end to debt distress. Some countries continue to incur arrears after a completed restructuring process and there are many examples in which sovereigns implemented a series of subsequent restructurings" (Das, Papaioannou, and Trebesch, 2012, p.13). Thus, the Puerto Rican Government will have to carefully gauge how much interest they can offer on the new bonds so as the debt remains "sustainable".

4. Conclusion

This paper has endeavored to lay down the present economic condition of the island of Puerto Rico and provide a backdrop of the federal as well as territorial economic and legislative reasons as to why the commonwealth finds itself in the said condition. We have traced several usual macroeconomic indicators that are important in a distressed economy but especially pointed out indicators like the rate of migration, labor participation rate, minimum and median wages as compared to states, and how federal legislation like the Jones Act and Section 936 have affected Puerto Rico as a territory. We believe that with the passing of PROMESA act, both the creditors and the debtors have entered the uncharted territory of debt negotiations. We have analyzed this new piece of legislation which has bearing upon not just the case at hand but is a bankruptcy code for other unincorporated territories of the US as well. We have attempted to point out the unique features of this act and the concerns that it addresses and the ones it does not. We believe that the members appointed to the Oversight Board have to perform a tough balancing act between managing the $70 billion debt and continuing to fund the island's $43 billion in pension liabilities. It is important for the

Oversight Board to recognize that while Fiscal Plans need to be balanced, too many budget cuts might be impractical if not from a moral, from an economic standpoint because when all's said and done, the American citizens of Puerto Rico need the basic public facilities and perhaps even more with a Zika outbreak on their hands. Some political leaders and concerned protesters have voiced the opinion that the Oversight Board raises a specter of colonialism for the island but after a careful reading of the legislation and comparing it with the pitfalls commonly experienced in debt negotiations, we believe that PROMESA is the best possible outcome for Puerto Rico, at the moment, to remove significant hurdles during and after the debt restructuring process. The legislation alone does not guarantee its success; the 7 board members appointed to the Oversight Board must act in a bipartisan manner to ensure that normalcy returns to the island's institutions and its people.

We have analyzed past trends of sovereign debt negotiations to make pertinent suggestions to Puerto Rico and its bond issuing institutions about the ways to expedite the process and to ensure debt sustainability. It will be of great interest to see how the members of the Oversight Board co-ordinate with the Puerto Rican government and with the creditors to fulfill their daunting task. Only once the Oversight Board members are appointed and the negotiations begin, will us able to see in earnest how the legislation of PROMESA translates into action. How the inhabitants of the island react to the Oversight Board's decisions and what effects PROMESA has on the debate surrounding the island's political status in the future remains to be seen. We wish the Puerto Rican government a smooth debt restructuring process for the fate of an island and its entire people depends upon it.

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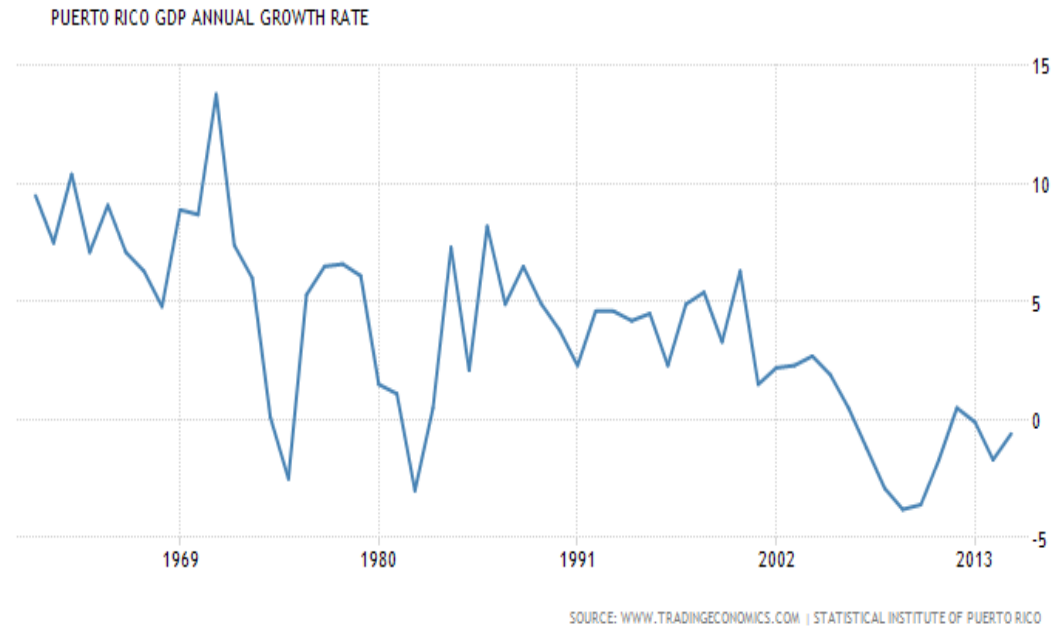
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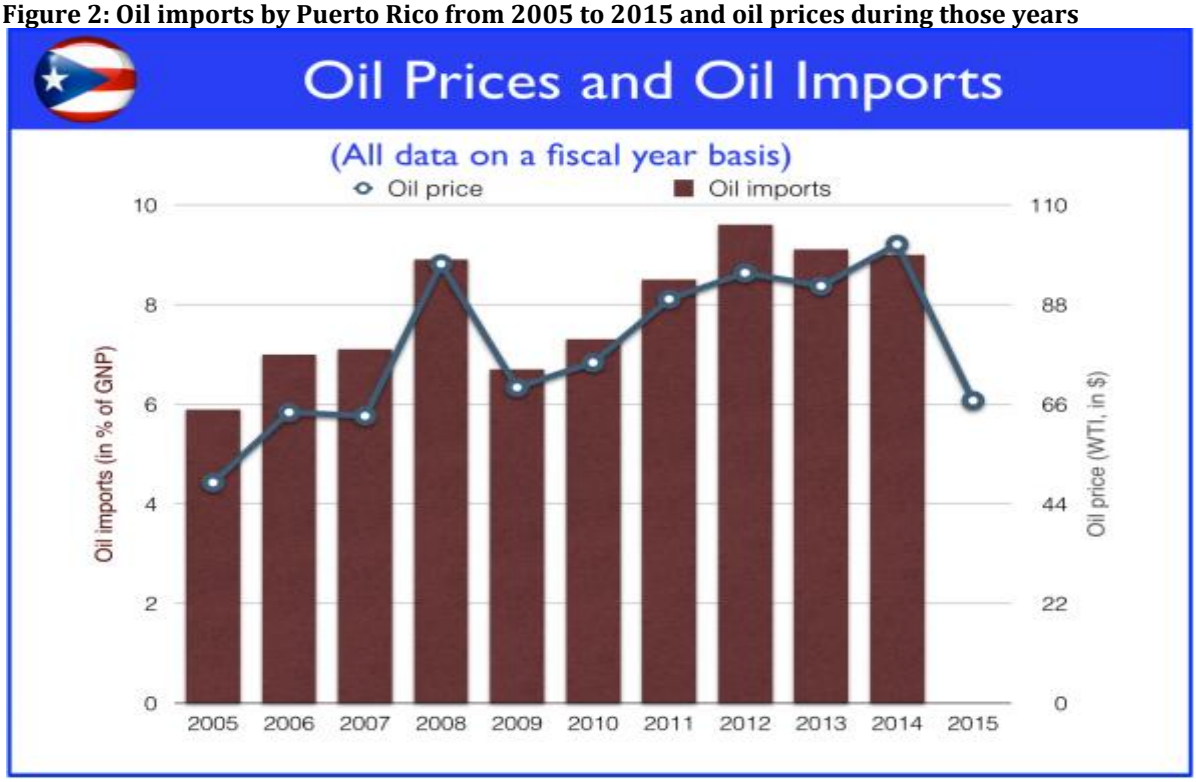
Appendix

Figure 1: Puerto Rico GDP annual growth rate



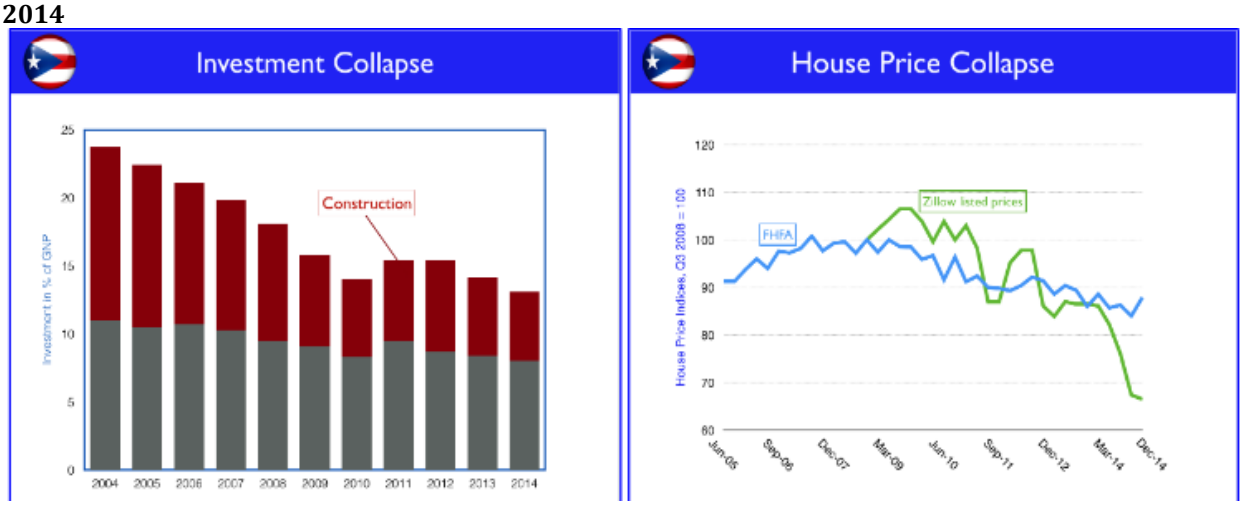
Source: www.tradingeconomics.com.

Figure 2: Oil imports by Puerto Rico from 2005 to 2015 and oil prices during those years



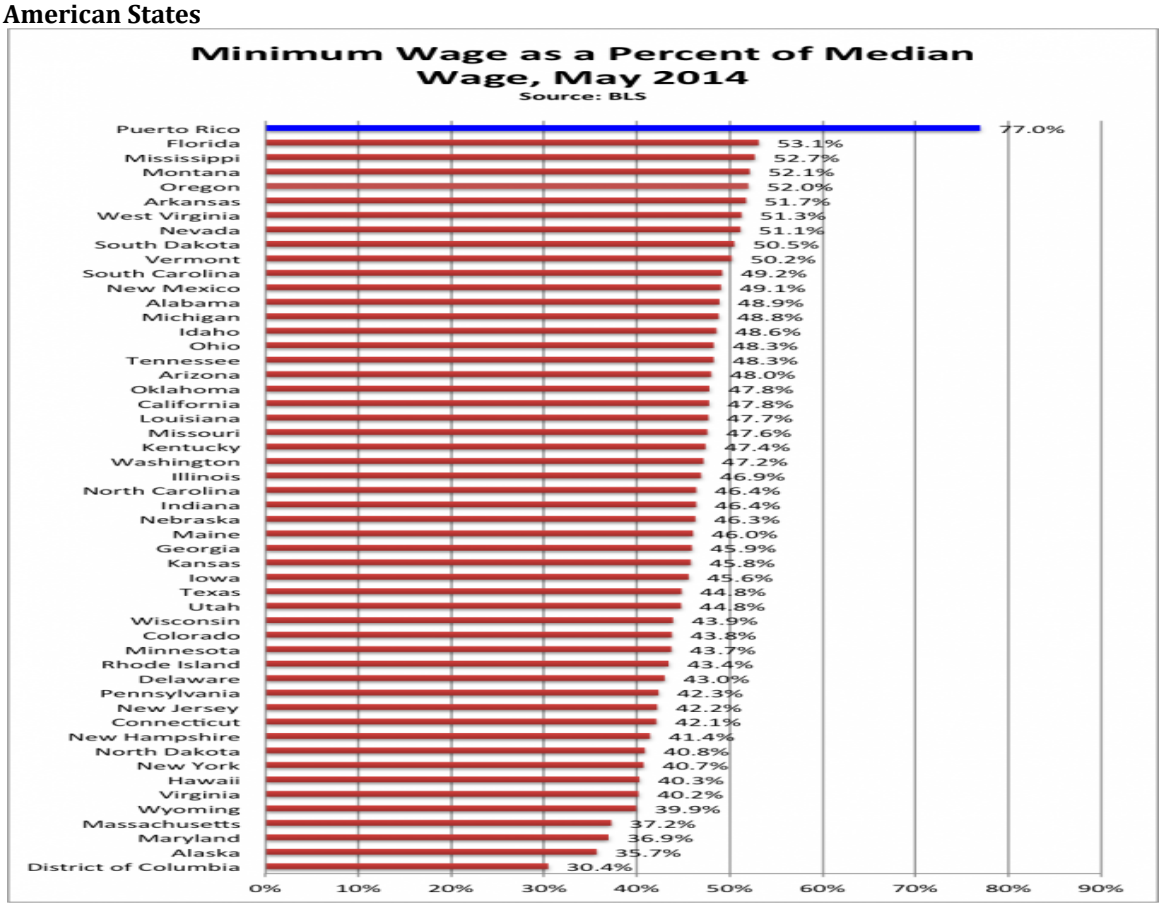
Source: "Puerto Rico- A Way Forward" by Krueger, A.O., Teja, R., and Wolfe A.

Figure 3: Investment Collapse (in % of GNP) from 2004-2014 and House Price collapse from 2005-2014



Source: "Puerto Rico- A Way Forward" by Krueger, A.O., Teja, R., and Wolfe A.

Figure 4: Minimum Wage as a Percent of Median Wage. Comparison between Puerto Rico and American States



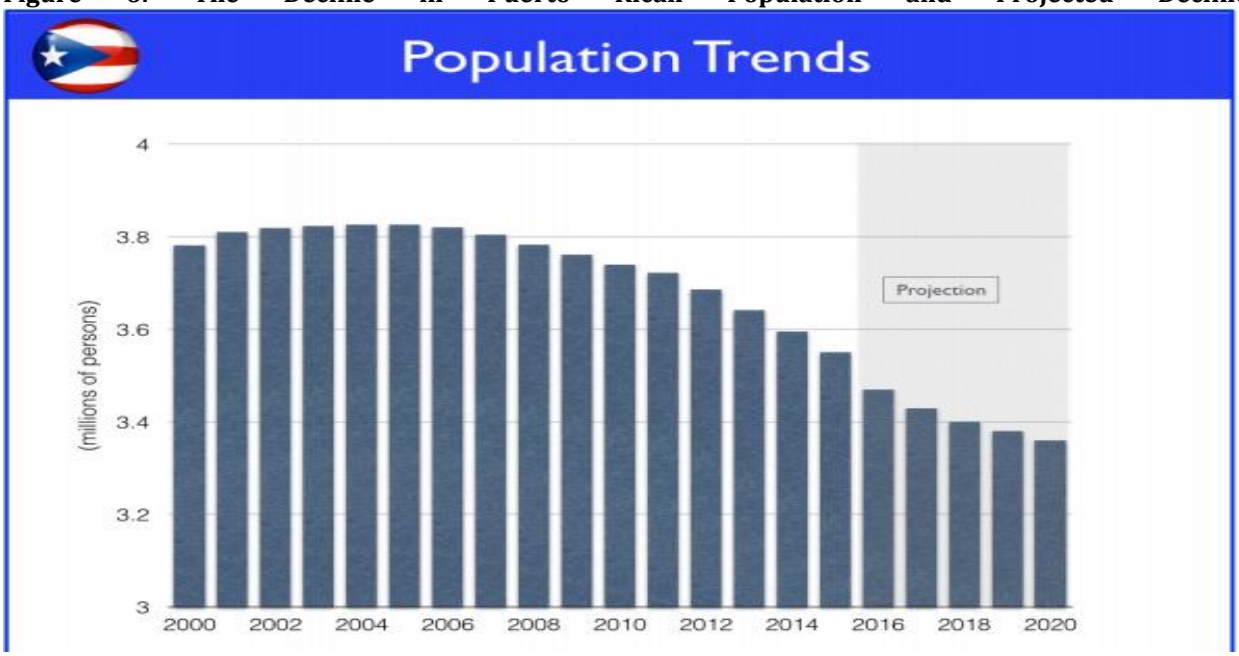
Source: "Puerto Rico- A Way Forward" by Krueger, A.O., Teja, R., and Wolfe A.

Figure 5: Declining Labor Participation Rate owing to massive unemployment benefits and other reasons.



Source: "Puerto Rico- A Way Forward" by Krueger, A.O., Teja, R., and Wolfe A.

Figure 6: The Decline in Puerto Rican Population and Projected Decline



Source: "Puerto Rico- A Way Forward" by Krueger, A.O., Teja, R., and Wolfe A.

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Learning Organization and Work Engagement: An Empirical Evidence of a Higher Learning Institution in Malaysia

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Abstract: Rapidly changing business environment requires organization to gain competitive advantage in order to survive. As people is known to be the most valuable assets to an organization, having employees that are actively engaged in their work can positively leads to higher performance and subsequently contribute to the success of the organization. One of the factors that would lead to work engagement among employees is through the learning organization concept which provides continuous learning and improvement, directly linked to an employee daily work and development. Despite its importance, seldom has it been reported in the literature that this paradigm has been examined. Therefore, this study attempts to determine: (i) the level of work engagement among employees; and (ii) the relationship between learning organization dimension and work engagement. Data collected from 150 employees of an institution of higher education revealed that work engagement among employees is at high level. Only four learning organization dimensions namely, empowerment, embedded system, environmental connection and strategic leadership were found to have positive and significant relationships with work engagement. The implications and consequences of the study findings for higher learning institutions are further discussed.

Keywords: *Learning organization, work engagement, higher learning institution*

1. Introduction

In today's fast changing environment, becoming a high performing organization has become a top priority in every organization. As employees offer organizations a competitive advantage through its unique contribution, having employees that perceived 'work as meaningful' and subsequently engage to their work is crucial. This is because, when the organization has employees that are positive, enthusiasm and inspired with their work, it will directly give a positive impact to the organization's performance (Anitha, 2014). Work engagement is referred to as a "positive, fulfilling, work related state of mind that is characterized by vigour, dedication and absorption" (p. 295) (Schaufeli, Salanova, Gonzales-Roma, & Bakker, 2002). In other words, employees who are engaged perceived their work positively and this will lead to improved outcomes not only for themselves but also to the organization as a whole. The importance of work engagement has been highlighted in the literature. Work engagement is often been associated with individual's work quality based on their well-performed job which subsequently leads to greater organizational productivity and growth (Saks, 2006). Work engagement provides positive impact on job satisfaction, organizational commitment, intention to quit and burnout level (Anitha, 2014). With high quality and efficient employees, it will directly give impact to the organization's performance. On contrary if the employees do not engage with their work, they might tend to quit their job, take frequent leaves, make mistakes on the work given and have attitude problem in the workplace.

As the element of learning is important in ensuring employees are engaged with their work, having a learning organization culture would serve as a platform in creating continuous learning that can be directly help in enhancing the organization's performance (Weldy & Gillis, 2010). Indeed, when the employees perceived that the organization give them support (with continuous learning culture) they tend to show more positive attitude, good behaviour and offer higher quality of work towards the organization (Islam, Kassim, Ali, & Sadiq, 2014). Despite the logical connection between learning organization culture and engaged employees, only a few studies have examined this connection, especially in the context of Malaysia. If employee's work engagement is to be developed through a culture of learning within the organization, a framework that aligned these variables is necessary. Therefore, this study attempts to determine: (i) the level of work engagement among employees; and (ii) the relationship between learning organization dimensions (individual, team and organization) and work engagement.

2. Literature Review

Work Engagement: Work engagement can be defined as a positive, work-related that is characterized by the dimensions of vigour, dedication and absorption (Balducci et al., 2010). Vigour can be described as a high level of energy and mental resilience while doing work, willingness to put their effort on work, and their persistence cognition and emotion. Meanwhile, dedication is referred to as the characters of enthusiasm, inspiration and feel of pride with their work or strong involvement with their work, and absorption level of employees' happiness with their work (Balducci et al., 2010). Work engagement has positive consequences for both employees and organization. It is proven that the organization also needs work engagement among their employees. When the employees are engaged with their work, they tend to experience positive emotions such has enthusiasm, joy, happiness, better health and often transfer their engagement to others (Banihani, Lewis, & Syed, 2013). Indeed, the positive emotional connection between employees and their workplace can be seen through their positive attitude specifically, when they express it through physical, emotional and cognitive aspects in performing their task (Anitha, 2014). Numerous studies provided empirical evidence on the relationship between work engagement and positive work-related outcomes. For example, work engagement has been found to be positively related to job satisfaction and organizational citizenship behaviours (Saks, 2006); customer loyalty and employee performance (Salanova, Agut & Peiro, 2005); intention to quit and burnout level (Anitha, 2014).

Learning Organizations: The idea of learning organization has received many interests from both practitioners and scholars. Indeed, learning organization is not the only transformation of the organization but it is a continuous transformation and transformation of mind (Watkins & Golembiewski, 2007). Defined as an organization that adapts continuous learning and transforms itself for improvement, the learning organization culture encourages innovation and the employee's growth with organization (Watkins & Golembiewski, 2007). According to Marsick and Watkins (1994) and Watkins and Marsick (1996), there are three levels of organization learning which is the individual level, team or group level and organization level. The seven dimensions of learning organization are divided into these three levels. The dimension of continuous learning; and Inquiry and dialogue are identified under individual level of learning (Muneer et al., 2014). Meanwhile, the team learning represents the team or group level. At the organizational level, it is consisted of four dimensions of learning organization which are empowerment, environmental connection, embedded system and strategic leadership (Yang, Watkins, & Marsick, 2004). The definition of each learning organization dimension used in the study is summarized in Table 1.

Emerging research supports the significance of learning organization dimensions and the impact it has on work engagement. As highlighted by Park, Song, Song, & Kim (2014), work engagement helps employees to create new ideas and give them initiatives to implement ideas with the support from the learning organization culture. Specifically, employees who perceived that they have high learning organization culture tend to have more proactive behaviours and discretionary efforts. Thus, it is important to get the organization's support for employee's work engagement. This can be done through continuous learning, knowledge sharing, empowerment and social interactions among all employees (Park et al., 2014). At the individual level, when employees are exposed to *continuous learning*, they will be more confident and this will motivate them to be more engaged in their work (Anitha, 2014). As dialogue is the medium where people use to share meaning and their understanding, it provides a platform to listen and give feedback on the perspective that is different from their own, and later use what they have learned to change. This shows that the mutual trust and understanding that built through *inquiry and dialogue* can lead to employee's involvement and get engaged (Raelin, 2012). Therefore, it is proposed that:
H1: There is positive relationship between learning organization dimension (individual level) and work engagement.

Team Learning is another aspect that can enhance the level of work engagement. When team members trust and support each other, it will promote work engagement among employees. Team learning allows each team member to learn together and try new things. Additionally, team learning involves positive interaction among each other. Thus with the positive and good relationship in team learning, their work engagement is expected to be high (Anitha, 2014). Therefore, it is proposed that:
H2: There is positive relationship between learning organization dimension (team level) and work engagement.

Table 1: Learning Organization Dimensions

Dimensions	Level of Learning	Definition
Continuous Learning	Individual	Learning is designed into each employee work in order to give them opportunity to learn on the job, and to continue education and keep growth
Inquiry and Dialogue	Individual	People are gained productive skills in order to express their own views and their capacity to listen to other views. This culture is to support questioning, feedback and experimentation.
Team Learning	Team	Defined as the work designed to groups to access the different modes of thinking, ideas, and expected to learn and work together.
Embedded System	Organization	Both the high and low technology system is use to share learning and integrated with work to provide an access to all.
Empowerment	Organization	Defined when the organizations get the people to be involved in setting, owning and joint vision. This is decision making that makes together will motivated people to learn toward what they are responsible to do.
Strategic Leadership	Organization	Defined as the leaders' model, champion and to support learning to use the learning strategically as the business results.
Environmental Connection	Organization	The environment is to help the people to see the effect of their work and use the environment as information to adjust the work practices and make the organization linked to the communities.

Source: Marsick & Watkins (2003).

At the organizational level of learning organization dimensions, work engagement can be achieved through embedded system, empowerment, environmental connection, and strategic leadership. *Embedded system* or shared learning is where the technology plays an important role in making the learning organization more effective and efficient. One of the advantages using technology is the process of capturing, disseminating and sharing knowledge can be done systematically throughout the organization. It is necessary for organization to have this system for employee's development. As a result, shared learning system will lead to employees to be more actively engaged with the organization (Naujokaitiene, Teresevience, & Zydziunaite, 2015). Previous researches indicate that there is a link between leadership attributes and work engagement. This is important because leaders play an important role in encouraging or discouraging the work engagement (Zhang, Avery, Bergsteiner, & More, 2014). *Leaders* in the organization help employees in clarifying goals and give them directions on how to achieve their goals, which directly have an impact on their performance. Since work engagement is regarded as a long term initiative, the development process should be continuous in ensuring employees are well-engaged and subsequently contribute to the increase of organizational performance (Venkatesh, 2015).

Additionally, *empowerment* can lead to work engagement through effort, persistence and initiative (Macey & Schneider, 2008). *Environmental connection* with employees can be one of the significant factors that contribute to the employee's level of engagement. This is when the environmental of work are harmony and connected in which the employees receive feedbacks and support from the work environment which can help them to be more engaged (Anitha, 2014). Thus, it is hypothesized that:
H3: There is positive relationship between learning organization dimension (organizational level) and work engagement.

3. Methodology

The study utilized a correlational study research design. Data were collected using personally administered questionnaires from employees (academics and non-academics) of a semi-government institution of higher

learning. Additionally, the study used census method, where it involves whole entire of the population in the research. The instruments used in this study were adopted from established sources using 5-point Likert scales ranged from 1 to 5 (1= Strongly Disagree to 5 = Strongly Agree). Specifically, 21 items of Dimensions of Learning Organization Questionnaires (DLOQ) from Yang et al. (2004) were adopted to measure learning organization dimensions. Specifically, six items were used for the individual level (continuous learning (3 items), inquiry and dialogue (3 items), three items for team level (team learning) and 12 items for organizational level –namely empowerment (3 items), environmental connection (3 items), embedded system (3 items) and strategic leadership (3 items). To measure work engagement, 9 items of Utrecht Work Engagement Scale (UWES-9) from Balducci et al. (2010) was used. Data were analyzed using Statistical Package for the Social Sciences Software (SPSS) version 20.0

4. Findings

Data were collected from 150 employees, yielding a response rate of 62.5 percent. Most of the respondents were female (57.3 %) and they were in the range of 31 to 40 years old. Most respondents involved in the study were the administrators (65%) and almost half of the respondents have tenure of 1 to 4 years working in the organization. Based on the reliability test conducted, all adopted measurements were found to be reliable as the Cronbach's alpha values were found ranging from .66 to .88. Based on the results, it was found that all variables have mean values ranged from 3.86 to 3.98; with work engagement has the highest mean value of 3.98. The range of standard deviation among variables is reported between .46 and .51. Table 2 indicates the inter-correlation values among variables. It was found that all independent and dependent variables used in the study were significantly inter-correlated.

Table 2: Means, Standard Deviation and Inter-correlation among variables

Learning Organization Dimensions	Mean	Standard Deviation	Individual Level	Team Level	Organizational Level	Work Engagement
Individual Level	3.90	.46	1.00			
Team Level	3.86	.50	.64**	1.00		
Organizational Level	3.87	.51	.62**	.54**	1.00	
Work Engagement	3.98	.49	**.38****	**.37****	**.46****	1.00

Table 3: Regression Analysis

	Dependent variable Work Engagement
Independent variables	
Learning Organization Dimensions	
Individual level	.01
Team level	.15
Organizational Level	.38**
F value	14.63**
R^2	.231
Adjusted R^2	.215

From the regression analysis result (Table 3), only organizational level of learning ($\beta = .38$, $p < .01$) were found to be significantly related to work engagement. Thus, H3 is supported. No support was received for the relationship between individual and team level of learning organization, with work engagement, which resulted to the rejection of H1 and H2. The research model as a whole explains 23 percent of variance on work engagement.

5. Discussion and Conclusion

The two main objectives of the study are to: (1) determine the level of work engagement among employees; (2) to determine the relationship between learning organization dimensions (individual, team and organization) and work engagement. The result indicate earlier reported that the level of work engagement among employees is at a high level. Even though most of the employees have tenure of less than five years working in the organization, work is perceived as positive and hence employees has high energy and committed in doing their work. Based on the analysis conducted, it was also reported that only organizational level of learning was found to have positive significant relationship with work engagement. In another words, the respondents perceived that organization needs to have empowerment, environmental connection, embedded system, and strategic leadership in order to develop work engagement among employees. This also indicates that the culture of learning organization needs to be strongly established at the organizational level first, for the work engagement to be inculcated among employees. This is because learning at the organizational level is strongly linked to the culture of the organization through values, beliefs and practices embedded in the organization. The culture of the organization will directly shape an employee and subsequently influence the outcome of their performance. Therefore, it is true that learning organization involves not only the transformation of the organization but it is also a continuous transformation of mind at the organizational level (Watkins & Golembiewski, 2007). Additionally, work engagement among employees will not be materialized if learning is initiated at the individual and team level without having the support at organizational level. The findings is in line with previous studies conducted on learning organization and work engagement e.g., Naujokaitiene et al. (2015); Macey & Schneider (2008); Anitha (2014); Zhang et al. (2014).

Implications, Limitations: The significance of the study is definitely to the body of knowledge as it adds to the existing literature on learning organization and work engagement. This study particularly, looks at three different levels of learning happening in the organization and explores which has the most influence on work engagement. The study also provides practical implication to the education sector particularly higher learning institutions especially on emphasizing the empowerment practices among employees; having a good system in managing learning and connecting the outcomes of learning; and performance on communities in order to make employees engage in the work. Perhaps, the utmost important to encourage work engagement is the strategic leadership of the organization as they are the key people that drive and chart the direction of the organization – the one that makes an organization a learning organization. For future research, firstly, it is suggested that the study to involve various public and private universities in Malaysia, as this study is limited to one particular institution of higher learning only. Secondly, as suggested in the literature, studies that is organization based (i.e., learning organization) should utilize longitudinal study design as perceptions on it may be captured more effectively across time. Lastly, if possible, moderating and mediating variables should be included in future to enable the researcher to better understand the dynamic framework between learning organization and work engagement.

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Impact of Financial Management Practices on SMEs Profitability with Moderating Role of Agency Cost

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Abstract: The importance of Small and medium enterprises (SMEs) towards economic development and growth is considerable. Some SMEs are facing difficulties to their development due to the lack of financial resources and management experience. The objective of this study is to check the relationships of financial management practices on profitability of small and medium enterprises and also to check the impact of agency cost on this relationship. This study consists of data analysis of two hundred SMEs from Faisalabad Pakistan. The study used primary data predominantly. SPSS 23 is used for descriptive analysis and Structural Equation Model (SEM) through Partial Least Square (PLS) 3 for hypothesis testing. The findings of this study indicate the presence of positive relationship between financial management practices and SMEs profitability but agency cost as a moderator has no effect on this relationship. The study strongly recommends higher adherence to financial management practices. Policy makers, developments partners, owners, and managers of SMEs may use these findings for sustainability of their business in Pakistan.

Keywords: *Financial management practices, Agency cost, SMEs, Working Capital*

1. Introduction

Small and medium enterprises (SMEs) have significant contribution toward creating employment and also toward the economic development and growth (International Labor Organization, 2013, p. 1; Ratten, 2014; ulHaq, Usman, Hussain, and Anjum, 2014; Karadag, 2015). In Japan, small and medium industries have marked dominance, constituting about 99 % of corporations (The Information Dissemination and Policy Promotion Division of Japan's Patent Office, 2009). In South Africa, SMEs contribute about 91 % of formal business and provide 61 % employment opportunities and enhance the GDP of South Africa between 52 to 57 % (Abor & Quartey, 2010). In low income countries like Pakistan, the scale of the businesses size is limited to micro to medium. The main question is that how small and medium businesses measure their performance (Ahmad & Harif, Hoe, 2013, p. 87; Benedict & Matsotso, 2014, p. 247) said that failure of SMEs is inappropriate scale of measurement of the performance. The measurement of business is better through financial performance (Gallani, Krishnan & Kajiwara, 2015, p. 6). 1). Effective use of finance much emphasized by modern research (Gitman, 2011). This scholarly effort will help to identify the financial management practices effect on the profitability of SMEs and also identify the agency cost effect. Good corporate governance is necessary for improving the performance and profitability of businesses (Braga-Alves & Shastri, 2011; Price, Rountree & Roman, 2011). In developing countries attention has been given to governance of the firm but still firms are suffering the governance problem (Ekanaakey, Perera & Perera, 2010). Actually corporate governance are rules under which the relationship of manager and owner is over looked and it is make sure that the manager is working for best interest of the owner.

The contribution of this study is that financial management practices of SMEs are to improve its financial performance and review the cost that has to bear to the owner of the firm for maintaining the fair behavior of the financial manager in the best interest of the firm. SMEs are a key source of economic growth (Sadi & Henderson, 2010), whether in developed or developing countries. In Saudi Arabia SMEs represent more than 90% of enterprises providing 51% of jobs in private sector and 22% of GDP (Mohammed, 2015 b). Importance of SMEs is now widely recognized as playing a vital role in creating new jobs (OECD, 2006; Karadag, 2015). Pakistan is also a developing country and the importance of SMEs can't be ignored. Although Importance of these entities considerable but a high failure rate has found there, which led researchers to question the management practices of these entities (Fatoki, 2014, p. 922)? In Pakistan SMEs are not providing required results although when compared with other developing countries because in Pakistan SMEs are facing many problems. From the major problem lack of financial management practices also include. This study is conducted in Faisalabad city so that financial management practices adopted by SMEs and the impact of these practices on firm performance can be viewed. For this study Faisalabad is selected

because this city is hub of the industries in Pakistan and due to this characteristic is also known as Manchester of Pakistan.

2. Literature Review

Pakistan located in South Asia, with population of 188 million and DGP rate 4.7 % (The World Bank, 2015). Trade and commerce played an important role in development of the economy so that the government of Pakistan has established a body for support and promote this sector. This government body is called Small and Medium Enterprises Development Authority (SMEDA) and it has responsibility of policies making related to promotion of SMEs, facilitation of financing is also the responsibility of SMEDA. It also helps in training and educating to the entrepreneurs. Pakistan's position is lowest if it compared with other South Asian countries. The ratio of new firm in Pakistan is very low and close competitors of the firms are India and Bangladesh. Other member countries of Organization for Economic Co-operation and Development (OECD) performing much better. Specifically, United Kingdom (UK) is performing excellent and got the position at top of the ranking table. There are many factors which are badly affected performance of Pakistan businesses, and in this regard small businesses can play vital role to improve the Pakistan economy. Now Pakistan has also got memberships of OECD. In Pakistan the entrepreneurs are different from the entrepreneurs in other countries. Ali et al. (2010) has reported the impact of culture of Pakistan on entrepreneurial intentions. By using Hofstede's dimensions about cultural, the results indicate that elements of culture for instance; collectivism and uncertainty avoidance are badly affecting the thinking of entrepreneurial intentions in Pakistan.

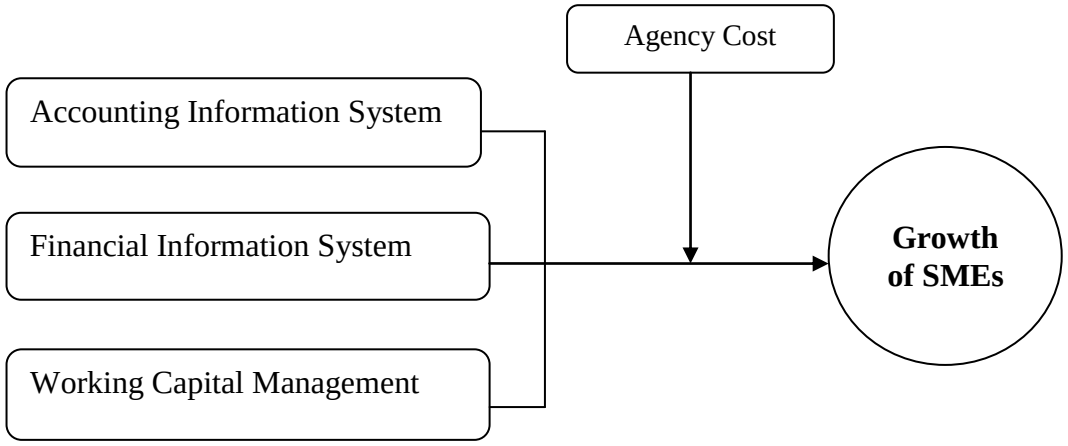
SMEs stand for small and medium enterprises but State Bank of Pakistan (SBP) define SMEs in this way that SMEs can be classified into these three levels of business form micro enterprises, small enterprises and medium enterprises (SBP 2010). By the definition of State Bank of Pakistan SME means that any entity which is not a public limited co and has not full time employees more than 250 (manufacturing business), not more than 50 (in a trading or service business). Like other management science, financial management also establish its goals first and then its objective to achieve its financial goals. The main goal of financial management it to get maximum profit for the firm because many researchers have argued that SMEs play a significant role in the social and economic development of a country (for example, Benzing, Chu and Kara 2009, Al-Disi, 2010; Han, Benson, Chen and Zhang, 2012; Shinozaki, 2012). Sometime financial decisions taken by owner of the firm proved wrong or wrong decision taken by the hired manager badly affect the profitability of the firm. Profitability of the firm could be damage due to the inefficient financial management. Mostly small and medium size businesses failed due to the absence of sufficient knowledge about efficient financial management. A sound financial management system has the effective governs system to the incomes, expenses, assets and liabilities to organizational performance (Abanis et al 2013). The purpose of this study is not to cover all the aspect but only these practices will be included in this study accounting information systems, Financial Information System and working capital management.

Accounting information systems consists of bookkeeping, recoding financial activity transactions, cost accounting and the use of computers to manage these all activity. Small and medium enterprise publications and research have highlighted the importance of management of accounting system for SMEs. For example, in the literature of Lavia Lopez and Hiebl (2015) it was concluded that management of accounting system has a positive effect on performance of SMEs. Many SMEs are lower in their formal planning processes (Pemberton and Stone house, 2002). This makes relevant to examine the planning practices of small and medium businesses. Purpose of this study is to review the relationship of accounting information system toward firm profitably. Financial Information System: the frequency and the purpose of financial reporting, analysis of financial reporting, interpretation and auditing of financial reporting. Financial management expertise: the formal and informal education, relevant qualifications, training in financial management and overall financial management expertise. Working capital includes these content management of cash activity, management of account receivables and inventory management. Larger firm invested larger cash in the working capital and also have larger amounts of short term payables due to the source of financing (Deloof, 2003). Both internal and external factors can influence the decision about current assets and current liabilities level. Recent studies, Silva (2011) and Gomes (2013) found positive relationship between working capital (WCM) and profitability, which indicates that firms have optimal working capital level which maximizes their profitability; see also Baños-Caballero *et al.,* (2012) for evidence concerning with Spanish SME. Agency cost

problem was raised by (Means and Berle 1932) and in their research they argued that agency cost might be increased when ownership and control of the business separated. They told the cause of this increasing cost in-consistent interest of stockholders and management. Baker and Powell (2005) in their study define the agency problem as that agency problem create difficulties that are faced by the financiers to ensure the owners or stockholders of firm that their finance or fund is not wasted on any un attractive project. To check the impact of financial management practices on firm growth and role of agency cost as moderator, the following hypothesis are developed:

Hypothesis 1:
H1: Accounting information system (AIS) is positively related with profitability of SMEs.
H1a: Accounting information system (AIS) is not positively related with profitability of SMEs.
Hypothesis 2:
H2: Financial information system (FIS) is positively related with profitability of SMEs.
H2a: Financial information system (FIS) is no positively related with profitability of SMEs.
Hypothesis 3:
H3: Working capital management (WCM) is positively related with profitability of SMEs.
H3a: Working capital management is not positively related with profitability of SMEs.
Hypothesis 4:
H4: Agency Cost as a moderator is affecting the profitability of SMEs.
H4a: Agency Cost as a moderator is not affecting the profitability of SMEs

Figure 1: Theoretical Frame Work:



3. Methodology

This study occupied primary data to analyze the results from financial management practices adopted by SMEs in Faisalabad. This study is conducted to test hypothesis and to develop a relationship between the dependent variable "Firm Growth" and the independent variables "Accounting information system, Financial information system, Working capital management" with moderating effect of agency cost. Survey questionnaires are used to collect the response from the target population. The sample for this study is comprised of 300 SMEs operating in Faisalabad city. Total three hundred questionnaires were delivered to the SMEs out of which two hundred responses were received back. During data entry, 20 questionnaires were incomplete and considered as redundant. Remaining 180 questionnaires were considered for the analysis. To test the hypothesis, Structural Equation Modeling (SEM) is applied by using partial least square (PLS. 3).

4. Results

For the assessment of validity and reliability Cronbach's alpha, composite reliability and average variance extracted (AVE) are used in the present study. According to George and Mallery (2003) "The value of

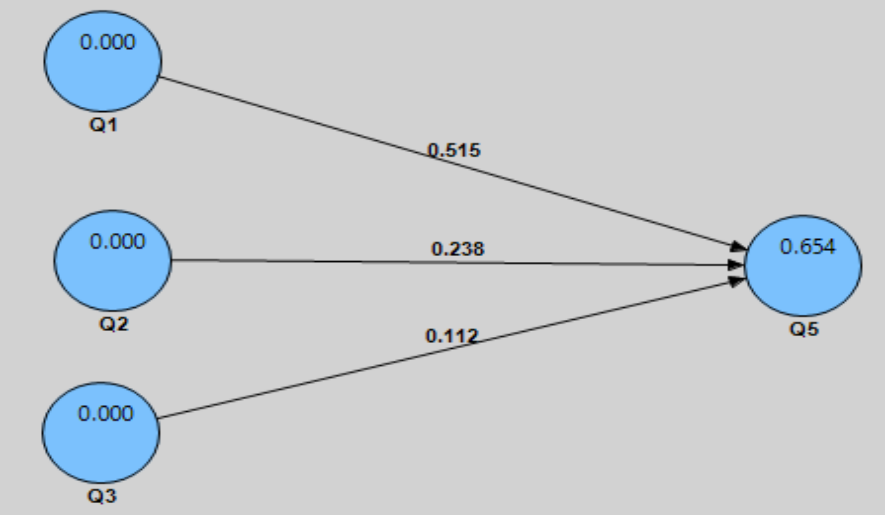
Cronbach's alpha less than 0.50 is not acceptable, 0.50-0.60 is considered as poor but acceptable, while any value above 0.70 is considered as good". Results show that data is valid.

Table 1: Convergent validity (Measurement Model Quality Criteria**)**

	Cronbach's Alpha	Composite Reliability	AVE
Accounting information system	0.875133	0.906144	0.618016
Financial information system	0.768943	0.831819	0.589577
Working capital management	0.772320	0.828675	0.631078
Agency cost	0.674158	0.779471	0.618230
Firm performance	0.552810	0.653952	0.565824

Financial Management Practices and Firm Performance Structural Model: Firm performance (FP) was assessed by using a three items scale. Three parameters (Accounting information system (Q1=.515), Financial information system (Q2=.238) and Working capital management (Q3=.112) were used to determine the firm performance and these parameters defined (Q5=.654) of firm performance overall. Its mean there were also some other variables effecting firm performance.

Figure 2: Predictive Relevance of Structural Models



Note: Q1: Accounting information system (AIS), **Q2:** Financial information system (FIS), **Q3:** Working capital management (WCM), **Q4:** Agency cost, **Q5** Firm performance

Table 2: Model Summery of All Independent Variables

Hypothetical relationship	Path coefficient	Absolute t-statistical values	Values of R2	Values of Q2
Q1 – Q5	0.515***	6.402		
Q2-Q5	0.238***	2.882		
Q3-Q5	0.112**	1.979		
Q5			0.654	0.231

Agency Cost (Moderator) and Firm Performance Structural Model: Agency cost is the moderator in this study. In below model agency cost (Q4) is taken as an independent variable (IV) to check its impact on firm performance and its shows (R^2=-.076, 0.191, 0.216) of firm performance which is very low of total firm performance. The value of R^2 is not significant because it should be more than 0.5Cronbach's (1951).

Figure 3: Predictive Relevance of Structure

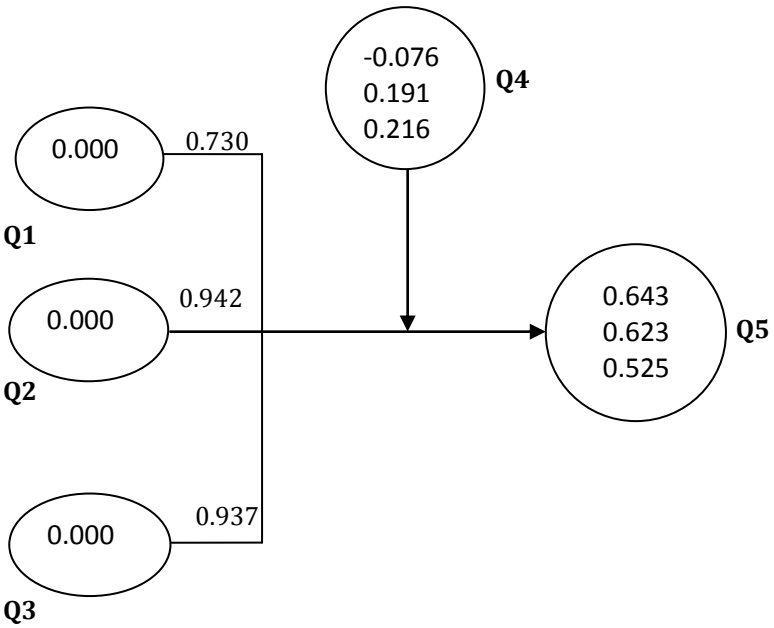


Table 3: Model Summery

Hypothetical Relationship	Path Coefficient	Absolute *t*-statistic value	Value of R2	Moderator
Q1-Q4	-0.076	0.730		
Q6			0.643	Not moderator
Q2-Q4	0.191	0.942		
Q6			0.623	Not moderator
Q3-Q4	0.216	0.937		
Q6			0.525	Not moderator

In the current study 4 hypothesis were tested. At the end results identified that 3 hypothesis (H1, H2, H3) were supported. It means results shown that AIS (accounting information system) FIS (financial information system) and WCM (working capital management) have significant impact on the profitability of SMEs. When one hypothesis was supported (H4a). It means result shown that agency cost is not affecting the relationship of (IV) and (DV) as a moderator in this study held in Faisalabad Pakistan.

5. Conclusion

The major objective of this study was to examine the effect of financial management practices on the profitability of small and medium business and to check the financial practices adopted by SMEs in Faisalabad city of Pakistan. The data analysis shows that financial management practices have significant impact of SMEs profitability. Most of the firms in Faisalabad city prepared their financial statement, balance sheet and income statement prepared regularly and frequently. Most of the firms have employed accountant for managing accounts department. Tendency to use computer for accounting information system was low in small size business but in medium size businesses accounting system was strong. 80 % of the total firms followed cash management practices which include cash budget, review of cash budget on monthly or weekly basis. Most of the small enterprises prepare cash budget on weekly basis. This research shows that mostly firms are familiar

to cash budgeting, cash control and cash flows. 36 % firm face cash shortage problem for its expenditure while 64 % firms face cash surplus. Finding tells that cash surplus is major problem than cash shortage for SMEs. Major issues created form cash surplus is that where surplus should invest for earn profit. Most of the firms have not better option to invest surplus cash in a profitable project. Agency problem may play a significance role in performance of business for this purpose present study was also examined the agency cost behaviors as a moderate between the relationship of financial management and SME profitability in Faisalabad Pakistan. But it was viewed that agency cost worked as a moderator in any other economy but not worked in Faisalabad Pakistan. This study also explains that agency cost as an independent variable have some effect on profitability of SMEs.

Limitations of the Research Study: Major limitation related to this study was financial and non-financial resources; time limitation and due to these limitation and scope of the study research have to limit the number of objectives. There are multiple areas of financial management related to research problem and research question directly or indirectly but due to the limitation of time and fund all the areas of financial management could not be investigated. Because resources were scarce so that all the SMEs in Pakistan could not be studied and selected SMEs in Faisalabad city were taken as a target population. Mostly selected firm were manufacturing concern. In Faisalabad city there are large no of small and medium business units and have different management practices and knowledge if compared with the SMEs situated in other cities of Pakistan. All primary data was collected from personal interview but failed to collect any documentary prove related provided information by the respondent. This study viewed the interval factor which influence the profitability but not viewed any external factor which may affect the financial management practices.

Implications for the Further Research: This study leads to the suggestion that in further research work should supplemented so that other areas could be examined which could not covered by this study. Following are the further suggestion for future research.

- Findings or current study can be used in other financial management practices such as management of current assets, management of fixed assets and capital structure management in other cities of Pakistan.
- Model of this study can be used in the other cities of Pakistan to check the financial management practices.
- Most of the small enterprises in Faisalabad Pakistan are not adopting better financial management practices the reasons can be reviewed.
- The financial performance of small enterprises and the medium enterprises can be viewed because there is difference in financial management practices of small enterprises and medium enterprises.
- In small enterprises owner himself manage financial activities and in medium enterprises accounts manger manage financial activities so that effect of owner and manager financial management practices can be viewed.

Finding can be used for the improvement of financial management practices especially in small enterprises for development of this sector of Pakistan.

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The Network Level Needed in Determining Organizational Structure

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Abstract: As the external operations of organizationsbecome more complex with increasing globalization and as structures encounter difficulties in multi-tasking and increased information flow management, there is a need for more flexible and faster way of organizing. In order to promote efficiency and flexibility, organizations' restructuring efforts result from need for coordination and work that increasingly occurs through informal networks of relationships rather than through formal structures. As the rapid adoption of social media and mobile computing are transforming how organizations in all industries relate to their environment, organizationalnetworks can be found inside every business and shape how employees share, communicate and collaborate at the workplace. New structures are emerging that blend different types of networks and hierarchies. The nature and complexity of the business determines the best the way its organizational structure is organized and this paper presents a theoretical model to help determine ideal organizational structures for different needs in order to deal with the pace and ambiguity of the business environment.

Keywords: *Network organization, Organizational structure, Strategic management, Hierarchy*

Network Organizations Definition: An organization is an entity, such as an institution or an association, that has a collective goal and is linked to an external environment. A network organization is a group of legally independent companies or subsidiary business units that use various methods of coordinating and controlling their interaction in order to function as a larger entity. A network organization is a new pattern emerging in many progressive 21st century enterprises. A social network consists of a set of actors ("nodes") and the relations ("ties" or "edges") between these actors (Wasserman& Faust, 1994). A business network meanwhile, is a set of two or more connected business relationships, in which each exchange relation is between business firms that are conceptualized as collective actors (Emerson, 1981). In other words, it refers to relationships between multiple firms that interact with each other (Möller and Wilson, 1995). Networks are constructed when individuals, whether organizations or humans, interact. This implies new ways of working, with consequences for the organization's structure, processes, people and culture. A network organization is a collection of autonomous firms or units that behave as a single larger entity, using social mechanisms for coordination and control.

1. Introduction

Traditional organizations integrate work vertically, where they place authority in a pyramidal, hierarchical structure. In the pyramid shape, power is concentrated primarily at the top. This hierarchical organizational form first emerged in the United States in the late 19th century with the arrival of mass production. Hierarchy eliminates anomaly, standardizes processes, solves short-term problems, and achieves efficiency with its mode of operating.The hierarchical organizationwasan incredible invention that could direct and coordinate the actions of many people that produce and sellvarious products or services tofar away distancesand do so effectively, efficiently, and profitably, time after time. However, hierarchy and its managerial processes do not handle transformation well and in a world with an ever-increasing rate of change, it is impossible to succeed without fast transformations. The problem with hierarchy is that its management processes hinder change, because they operate on autopilot, where everyone is ideally situated within an unthinking and predictable machine. Thus, hierarchy ignores new opportunities that require transformation because these do not go parallel with its core focus on maintenance and optimization. Hierarchies are structures consisting of internal networks, in which external network systems are almost not present,however, in the recent years, significant restructuring efforts have resulted in organizations with fewer hierarchical levels and more elastic functional and organizational boundaries.

This paper aims to explore these new structures and present a theoretical model to determine what kind of structures are needed to deal with change and uncertainty. In order to promote efficiency and flexibility,

these restructuring efforts requirecoordination and work that increasingly occurs through informal networks of relationships rather than through formal structures or work processes. By establishing external networks, theserelationships become central to performance and strategy execution. Organizational network analysis can provide an understanding to the inner workings of an organization as networks are means of making invisible patterns of information flow and means of making collaboration in strategically placed groups. As organizations restructure to respond to their everchanging environments, there has been a growing need for new kinds of organizational structures. The "Networked Organization" is one such response in which Lipnack and Stamps (1999) define it as one: *"Where independent people and groups act as independent nodes, link across boundaries, to work together for a common purpose; it has multiple leaders, lots of voluntary links and interacting levels."*These new ways of organizing show characteristics of innovation, resilience, and self-management and havebeen described as the lattice organization, the spider's web, the holonic enterprise, and the virtual corporation. All describe new ways of organizing where:authority is not through hierarchy; people and teams are linked across conventional boundaries (ie. departments, geographies); members and structurescan fastly adapt to everchanging circumstances; management style is through mutual responsibility and sharing; new ways to work effectively are explored; and teams are adjusted or dissolved as needed.

2. Literature Review

"Organizations are and always will be run by people. They are infused with purpose and meaning only through the imagination and will of people..." (Lawrence and Lorsch, 1967) The network highlights the importance of the social side of people's actions in organizational settings where the focus is not only on optimality or efficiency but also on interconnectedness. *"We know that personal interaction patterns in organizations are associated with power, turnover, information flows, attitudes, promotion opportunities, and social support"* (Salancik, 1995). Network analysis (social network theory) is the study of how the social structure of relationships around a person, group, or organization affects beliefs or behaviors. Pressure is inherent in a social structure and network analysis is a set of methods for detecting and measuring the magnitude of the pressures. The focus of the network approach is that reality should be primarily conceived and investigated from the view of the properties of relations between and within units instead of the properties of these units themselves, as it is a relational approach. In social and communication science these units are social units such as individuals, groups, organizations and societies.

Rogers characterizes a communication network as consisting of *"interconnected individuals who are linked by patterned communication flows"* (Rogers, 1987). While the original focus of network research was on understanding how the embeddedness of individuals influences their behavior, a similar approachwas applied to organizations (Burt, 1982; Walker, 1988; Mizruchi, 1992; Gulati, 1998). A communication network analysis studies "*the interpersonal linkages created by the shearing of information in the interpersonal communication structure,*" (Rogers, 1987) that is, the network. Network scholars have focused on the role of the social context, primarily, the cumulation of prior ties between firms for the formation of new organizational networks (Gulati, 1995; Gulati and Gargiulo, 1999). The term ''network'' refers to a set of nodes and the relationships that connect them (Fombrun, 1982). The notion of a network implies nodes and links. The nodes can be people, teams or even organizations as networks operate at many levels and the links are the various coordination and adjustment mechanisms. Two way links and reciprocity across the links is what makes networks work.The following terms are used in order to describe a social network (Tichy et al., 1979).

The size of the network is important, just as the density (or connectedness), which is the number of links in a network as a ratio of the total possible links. The degree of clustering determines the situation where dense regions of interconnected individuals appear in parts of the network. The term openness is used to describe the ratio of external links against the total number of possible external links. The term stability is used to explain the need for changes or lack of changes in the networks over time. Reachability is a measure of thenumber of links between any two nodes. Finally, centrality is the degree to which the formal hierarchy guides relations in the network.In a network, where formal authority and communications in hierarchical organizations often fail, high degrees of informal communications succeed. Network organizations are characterized by autonomy maintenance, relationship building, power sharing, and influence processes. They are open systems that respond to environmental circumstances and exhibit multiple levels of compexities as

they constantly engage in integration mechanisms to penetrate their boundaries. The benefits of the networked organization are: being close to the customer; maximizing the knowledge potential of an organization; minimizing disfuntion; and responsiveness and adaptiveness.

Network organizations are defined by elements of structure, process, and purpose. The design elements of co-specialized assets, joint control, and collective purpose distinguish network organizations from centralized organizations and inflexible hierarchies. (Van Alstyne,1997) Network organizations combine co-specialized and possibly intangible assets under shared control in their structure and joint ownership is essential in order to achieve an integration of assets and intercommunication in an efficient and flexible manner. As the external operations of organization become more complex with increasing globalization and as structures encounter difficulties in multi-tasking and increased information flow management, there is a need for organizational change and innovation in order to meet the increasing challenges. Network organizations can be seen as a blend of market and firm and they are somewhere between vertical integration and market disaggregation. Network organizations are more like firms than markets, but they occur in situations where demand uncertainty makes vertically integrated firms a bad idea. The conditions that favor network organizations are: Frequent Transactions, Demand Uncertainity, Customization, Task Complexity, and Structural Embeddedness. Most of these conditions are the same as those favoring firms rather than markets. A network organization is like an ordinary firm which does not have a system of direct supervision, nor standardized rules and procedures that apply throughout the firm. Consequently, they have to coordinate and control the units in some other way and some of the ways they do this are: Joint Payoffs, Restricted Access, Reputation, and Macroculture.

By examining today's most forward-looking organizations, we can identify the most important features of network organizations as; Borderless, Collaborative, and Pervasively-networked. Rockartand and Short (1991) listed the dimensions of the networks as:

- Shared goals as a necessary condition for organization of activities;
- Shared knowledge expertise an underlining force for effectiveness;
- Shared work as a means for incorporation of groups outside of local structure;
- Shared decision-making as a means for introduction of expertise from across the organizational spectrum;
- Shared timing and issue prioritization as a means for enhancing the action stepsparticularly in response to critical issues;
- Shared responsibility, accountability and trust as elements further strengthening the intra-organizational cohesion; and
- Shared recognition and reward as implicit in the effective functioning of networks

3. Position of the Paper

"*Network analysis corrects a tendency in organizational theory to focus on the trees rather than the forest, on the actions of individual organizations rather than on the organization of their actions*" (Salancik, 1995). A fully networked organization works through flexible networks and skills to get things done. This is a theoretical idea in some ways, as all organizations have and need some form of structure, but it reflects a desire towards flexibility and away from a formal system of reporting and solid structure. This more flexible and fast changing way of organizing requires a high degree of elasticity and skills in order to deal with this significant increase in complexity and ambiguity. Ambidexterity is needed since leadership, collaboration and personal effectiveness become different in this more flexible way of organizing. Organizations need to develop a 'softer structure' that networked organizations require in order to succeed and these 'softer' ways of working need to be established, managed and supported in different ways.

Networked organizations are a result of the need for organizations to work across the traditional vertical structure of function and geography, without a horizontal structure to replace the vertical. In a network organization, teams and groups can quickly come together around a particular activity and utilize the capability and resources they need from across the whole organization. Projects, teams and workflow cut

across functions and geography and teams can quickly be formed to meet a particular business need and get dissolved as quickly when the business is done. As decision-making members intervene and extend their influence through association, they alter the resources for themselves, their networks, and their competitors. Through this process the structure of even the network itself can change (Van Alstyne,1997). A network organization assumes a unifying purpose and the need for a sense of identity in managing the resources, parties, and actions necessary for conducting the strategy and goals of purpose. The rapid adoption of social media and mobile computing are transforming how organizations in all industries relate to their environment. Organization networks can be found inside every business and shape how employees share, communicate and collaborate at the workplace. The rise of the networked organization poses great opportunities for businesses, while changing the construct of leadership to break through organizational chaos and develop a new corporate culture, ethics and leadership skills. It is this kind of cultural change paradigm that will probably define the networked organizations of the future.

Organizations today need to respond more swiftly as cooperative problem solvers to their increasingly complex environments in the face of rising competition and change. Competition and change together increase problem complexity by increasing the number of dynamic variables that organizaitons must consider. The more rapid the change, the greater the decrease in the acceptable response time. The need for speed and expertise justifies the movement to points of execution, but it is inevitable some miscommunication and delays occur. The ability to interpret ambiguous circumstances is inherent and human-specific asknow-how cannot be easily transferred to or centralized in a single decision maker. Change not only creates complexity, but it also creates risk because intervening in the environment to control various externatilities can prove both ineffective and costly if partners are not interconnected. Change also cannot be managed without trust or open and efficient communicationbetween partners. Combining these perspectives results in the interpretation of network organizations as integrated systems with co-specialized assets and joint control.In summary, the primary characteristic of the networked organization comprise of:

- Shared goals reinforced through the mechanisms of social networks and informal relations as well as trust
- Support of information technologies comprising a basis for connection and information flows that essentially bind and maintain the organization
- Low hierarchy and centralization, with managerial responsibilities shared and overlapping across the organization
- The organizational integration over vertical and horizontal boundaries

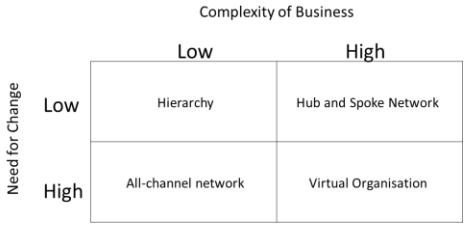
The variety of features characterizing network organization integrates all these perspectives to helpparticipants address rising complexity as cooperative problem solvers. Knowledge sources are important to solving large scale integrative problems and agents are indispensable in their expertise by working in groups. To function well as a group, mutually agreeable goals should be established as well as a coherent group identity, and norms for action and exchange that enable and disable group and non-group actions.With a network structure, knowledge workers are able to create and leverage information to increase competitive advantage through the collaboration of small and adaptable self-directed teams. In order for this to happen, the organizational culture needs to change from a hierarchial to an agile structure enabling multiple forms of organizing within the same organization.Many studies show that synergy helps motivate agents to work together and grouping requires agents to balance several needs: flexibility and stability, generalization and specialization, and decentralization and centralization.

4. Theoretical Model

Organizational ambidexterity refers to an organization's ability to be efficient in its management of today's business and also adaptable for coping with tomorrow's changing demand. Organizational ambidexterity requires the organizations to use both explorationand exploitation techniques to be successful, integrating both internal and external network systems. Most probably, the successful organization of the future will have a combined organizational structure of hierarchies, where only internal networks exist,as well as more elastic and adaptive structures consisting of external networks. Both structures should be designed and integrated for a common purpose, since, while the hierarchy is still as important as it has always been for work optimization, the network organization is where the big changes can occur, allowing an organization to

spot opportunities faster and then transform itself to utilize them. A network organization is a system of teams with individuals from all divisions and all levels, who leave formalities to participate in a non-hierarchical structure. The need for change in the environment should determine the balance an organization strives to achieve between hierarchy where internal networks are used and external network systems. Due to the vast potentially different combination of the employees' formal hierarchical and informal community participation, each organization is a unique type along a spectrum between a pure hierarchy and a pure community (flat) organizational structure. (Lim, Griffiths, and Sambrook, 2010).

The hierarchical structure should be used to manage production processes like automobile assembly where production could be broken down into a series of simple steps. Hierarchycontrols and manages all activities of a business from the raw materials to their allocation to consumers with internal networks. A centralized managerial hierarchy controls the entire production process, with mid-level managers establishing rules and procedures to manage a widebottom-line workforce.Hierarchy with only internal networks is efficient and effective when the complexity of business as well as the need for change is low. Until the early 1980's, the trend was to build increasing layers of management with more staff specialists, as this centralized hierarchical structure was seen as effective for managing large number of workers, but it lacked agility and was unable to process information rapidly throughout the organization.Research argues that as commerce becomes more global, hypercompetitive and turbulent, both markets and hierarchies displayed inefficiencies as modes of organizing production (Miles & Snow, 1992; Powell, 1990) As business became more complex, these rigid structures grew increasingly untenable and so management theorists began to look for other ways. The model proposed below is one matrix to deal with change and complexity as the main objective of an organizational structure is to support and complement the strategy of any business arrangement used to realize the objectives and goals of the organization.



As the use of only internal networks was not effective enough in their adaptability to change, structures involving more external networks had to be established. As social capital theory suggests, a firm's external networks play a major role in contributing to its performance (Leenders & Gabbay, 1999). Since the 1980's, many organizations have flattened their structures by shifting authority downward, giving employees increased autonomy and decision-making power. Advantages of flatter organization forms are in the decreased need for supervisors and middle management, faster decision making, and the ability to process information faster because of the reduced number of layers in the organization.Research shows that interconnectivity of networks in organizations can have a substantial impact on performance, learning, and innovation, and many benefits occur from well-connected networks between organizations (Smith, 1999). Together, competition and change increase problem complexity by increasing the number of dynamic variables that managers must consider while more rapid change decreases acceptable response time (Lawrence and Lorsch, 1967). A consequence of the types of flatter type of organizations, though, is that employees tend to be more dispersed both geographically and organizationally. To solve this problem, many organizations have eliminated superfluous processes and begun focusing on their core, value-creating business. Flat organizations using joint ventures and strategic alliances are providing increased flexibility and innovation, and are replacing many traditional hierarchies.

Rising competition and change cause organizations to respond more swiftly as cooperative problem solvers to their increasingly complex environments (Gasser and Hill, 1990). When the complexity of business is high (especially in the technological aspect), but the need for change is low, a more adaptable structure, which is the hub and spoke network seemsto be the best organizational structure.A hub and spoke network consists of centralized resources that support the various business units. The business units still have the freedom and

flexibility to connect with the market, but are still in alignment with what other spokes are doing. This structure is often used in used in transport, telecommunications, and freight industries. THY (Turkish Airlines) and UPS (United Parcel Service) are two examples of organizations who use such a structure. Though the central unit is not necessarily the leader of the network, information passes through this element before reaching the other nodes. In contrast, when the complexity of business is low, but the need for change is high, an all-channel network system seems the best organizational structure to work in. In the all-channel, there is more control and discipline compared to the hub and spoke network. Hub and spoke network is more centralized with independent nodes, whereas the all-channel network relies on the links between nodes. All-channel networks consist of individual units and every unit connects to every other unit as the network permits all members to communicate actively with each other. Although an all-channel network often features a central unit, or even multiple leaders, it is generally a collaborative system where units use decentralized decision-making processes, allowing for the autonomy of various local nodes. In this network, each node links to the next in sequence as information passes down a single line.

The all-channel model is becoming increasingly significant as a source of organizational collaborative power, withcriminal organizations as the most frequently cited examples. The all-channel network has no central leadership and no key node whose removal can disrupt the entire organization. Instead, the network is completely decentralized, allowing for indivudual initiative and autonomy in an organization. The all-channel network is one of the most difficult to maintain because it requires very strong communication to maintain ties between nodes, so this form of organizations have only recently become feasible with the coming of the information age. The paradigm shift to new organizational structuresis a response to unprecedented customer expectations and alternatives, global competition, time compression, complexity, rapid change, and increased use of technology. When both the complexity of business (especially in the technological aspect) and need for change is high, the concept of virtual organization appears in the picture. A virtual organization is a network of companies which support each other around a product and or a service idea. Virtual organization is an alliance of companies formed for the purpose of delivering specific products and/or services. The company who is responsible for the products and/or servicesis sometimes called the core company. The companies in the network are tightly integrated by information and communication technologies so that it is not apparent that the different processes are handled by separate companies. The core company is linked together by information and communication technologies with other companies,sometimes called satellite companies.

Lipnack and Stamps (1999) have identified elements of virtuality in teams and organizations. They define a virtual team as *"a group of people who interact through interdependent tasks guidedby common purpose that works across space, time, and organizational boundaries with linksstrengthened by webs of communication technologies."*They offer three key features for a successful virtual team. One is the choice of team members with the appropriate skills and knowledge for the task, second is the definition of a purpose to steer the group, and third is the effective linking of team members, including communication channels, interactions, and relationships. The most common examples given for virtual organizations are the Hollywood film industry and British Telecom. These new virtual organizations consist of groups and individuals from different companies that might include customers, competitors, and suppliers who have a focused purpose of bringing a product/service to market as rapidly as possible. As organizations create these many new linkages, advanced information technology becomes an important aspect and the key to the success of a virtual organization.

Virtual network structures bring together different companies with the aim of obtaining and maintaining a competitive advantage over others outside of their network. With the availability of internet and other communication technologies, a virtual organization is an option for many innovative entrepreneurs. An organization can theoretically span across the entire globe with the availability and infinite nature of networked based information technology. The characteristics of these organizations include a purpose that is motivated by specific market opportunities, world-class core competence, information networks, interdependent relationships, and permeable boundaries. Virtual organizations represent structures that are motivated by specific market opportunities and once the alliance has been formed and the opportunity has been exploited, partners may move on to new partnerships and alliances. Each partner in a virtual corporation contributes a world-class core competence, such as production, design, manufacturing, or

marketing and this ability of multiple firms to create synergies among functions and processes creates many unexplored possibilities. Virtual organizations can be considered as the newly emerging elastic and adaptable organizational structure.

5. Conclusion

Most of today's organizations were built on Weber's principles of bureaucratic management theory, including structuring an organization into a hierarchy and having clearly defined rules to help govern an organization.Now, however, there is a shift from hierarchical to networked organizations. The use and popularity of the network concept by social science researchers intensified in recent years, as scholars started to recognize the relevance and importance of relations for business activity (Easton & Araujo, 1986; Harland, 1995; Nohria & Eccles, 1992). This paper has examined the network organization literature to explain its multiple variables.The extremely bureaucratic organization structure of hierarchies, with only internal networks, is stillconsidered adequate to manage a vast number of employees, however the needs of today's business world create the need for organizations that can handle change better and faster. In our globalizing world, organizations have to deal with an increasingly dynamic work environment that require continuous adaptation to a variety of changes in the operations.The new business climate is characterized by profound and continuous changes due to globalization, exponential leaps in technological capabilities, and other market forces. These changes have brought on the network organizations, which are defined by highly co-specialized assets, an integrative joint control, and common purpose which tend to perform well under conditions which require both efficiency and flexibility. The form that emerged as the result, thenetwork organizational form balanced the flexibility of markets with the predictability of traditional hierarchies (Achrol, 1997; Miles & Snow, 1992; Powell, 1990; Snow, Miles & Coleman, 1992)

A 'business network' as defined by Yeung (1994, p. 476) is "an integrated and coordinated set of ongoing economic and non-economic relations embedded within among and outside business firms". Network organizations tend to perform well under conditions which require both efficiency and flexibility. Literature emphasizes that information and know-how are important network organization assets. Knowledge capital creates value and information links increase the ability to handle complexity. As the environment changes in various ways, this new system senses and responds to it, and in turn creates more solutions to adapt to a larger change with external network webs. Network organizations identify potential chances, anticipate future possibilities, establish strategies for organization-wide transformations, recognize and address barriers, and finally achieve change. The advantage of network organizational structure over any other form of organizational structure is its flexibility and efficiency. A whole new system that is much bigger, more powerful and that involves far more people is formed.

In the recent years, many high-performing organizations use structures with external networks, rather than traditional hierarchy of only internal networks, in order to lead and manage change, even going as far as establishing of virtual organizations.The nature and complexity of the business determines best the way its organizational structure is organized. The networked configuration of work systems affords intercommunication among differentially organized areas of work. Rapid developments of information and communications technology is tranforming the industrial age to the information age and the network organization seems a sensible response to the complex environment of the new millenium business. In this world of rapid change and uncertainty, organizations need to continually renew, revitalize and reinvent themselves in order to respond fast and creatively. The network-centric approach taps into the hidden resources of knowledge workers supported and enabled by information and communications technology, although it must be noted that a network-centric organization is more about people and culture than technology. The theoratical model proposed in this paper is one to help determine organizational structures in order to deal with the pace and ambiguity of the business environment.

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Awareness and Use of Serials in an African University Library: Faculty and Students' Perspective

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Abstract: The purpose of this study was to examine the use of print serials by students and faculty members of a satellite campus of the University of Education, Winneba. Specifically, this study sought to determine the level of awareness and use of serials among faculty and graduate students, and how this affect their perception of the value of print serials in teaching and learning. The study made use of survey research methods through the use of questionnaires. The population of the study consisted of 165 faculty members and 97 graduate students, with an eventual return rate of 66% each, respectively. The findings of the study revealed that both faculty and graduate students were, relatively, aware of the print serial collection in the library. However, despite this awareness, they used print serials, relatively, less frequently. Again, the study established that both faculty and students have significant positive perceptions on the usefulness of print serials in their teaching, learning and research roles. We recommend to librarians to create awareness of print serial collections while updating the collection, and enhance the positive perception of print serials by demonstrating, through outcome measures, how the use of print serials can be beneficial to the academic and research community.

Keywords: *Academic Libraries, Journals, Research and Publications, Serials, University of Education, Winneba*

1. Introduction

Academic libraries are valued for their expertise in providing current information resources such as serials to complement teaching, learning and research (Blackwell, 2014). Academic and research libraries acquire, organize, store, retrieve and disseminate information contained in serials for researchers, educators, students and other interested persons in their various disciplines. There are many kinds of serials. These include newspapers, magazines, newsletters, accessions, journals, indexes, abstract, reports, proceedings and transactions of societies and so on. Serials are a publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely."Despite their potential for providing current information to boost empirical research, lack of adequate funds coupled with high subscription rates, and the digital transformation of the scholarly communication process have immensely affected the development of print serial collections in academic libraries globally (Calhoun, 2014:36; Akinbode, 2011). Previous studies have found compelling evidence of the dwindling patronage of all print resources in academic libraries including print serials. Ogunniyi et al. (2011) attribute the low use of serials to the perception that print journals, for instance, are old and scanty. Liu (2011) identifies a number of factors responsible for the paradigm shift in print collection development to electronic resources. These include electronic resources' features for reference linking to additional resources, searching capability, currency, availability, and ease of access. According to the author, other advantages of electronic resources include ease of access, ease of printing, and ease of searching. Despite these strong reasons for an increasingly overwhelming preference for electronic resources, other experts are of the view that academic libraries must emphasise the superior value of their print resources as marketing tools (Dilevko & Gottlieb, 2002). Furthermore, these values include depth of treatment, portability, flexibility and the educative experience created for students. Indeed, Liu (2011) urges caution in the mad rush preference for online resources as mines of research material may never be available in the digital realm. The literature is replete with studies in often highly technologically advanced societies where preferences for digital information resources are very high, and by implication the use of electronic serials is the order of the day. However, most academic libraries in the present context continue to stock print serial collections due to continued demand for the print format. Consequently, this study examines the awareness and use of print serials by students and faculty members of an African university. Specifically, the study explores the awareness and use of print serials among faculty and graduate students; and, how awareness and use of print serials has reflected in their perceptions on the usefulness of print serials in teaching, learning and research.

Research Context: The study was conducted at a large multi-campus public university in Ghana, the University of Education, Winneba (UEW). The University was established in September, 1992 as a University College under PNDC Law 322. On May, 2004 the University of Education Act, Act 672 was enacted to upgrade the status of the University College of Education to the status of a full university and to provide related matters. The University has three satellite campuses. They are the Ajumako campus, College of Agriculture Education, in Mampong and the College of Technology Education, Kumasi (COLTEK), which is the study setting (UEW Dairy, 2014). As the second largest campus, the College of Technology Education, Kumasi (COLTEK) of the University of Education, Winneba is charged with the responsibility of producing professional educators in technical, vocational, and management education to spearhead a new national vision of education aimed at redirecting Ghana's efforts along the path of rapid economic and social development. The Library of the College of Technology Education, Kumasi (COLTEK) has two senior professional librarians who are management staff, three senior staff who are paraprofessionals and about fifteen junior staff. One senior staff is in charge of the Serials Section. The Library has a seating capacity of one hundred and fifty-six (156) readers. The Serial Section acquires, organises, manages and makes available a number of serials which includes journals, newspapers, magazines, reports, proceedings, among others. The journal subscription is one hundred and eighty (180) titles. Newspaper subscription is six and these include two daily national newspapers with the rest being non-daily newspapers. In addition to these, a number of magazines on different themes are collected.

2. Literature Review

It is generally acknowledged that serials play an important role in research. According to Wiser (2014) serials will continue to make a special impact on the scholarly community as they contain the most current and vital information on various disciplines. The role of serial publications in scholarly communication has been well documented. Aina (2006) confirms that a journal is the principal medium for reporting research findings because of the wide publicity it gives to the author. Information in journals is a product of research and may never appear again in any other form (Nwalo, 2001). This accounts for the great importance attached to serial publications by libraries and researchers in Africa. Serials are sources of current information and have several other contributions to make to education. Serials can be regarded as the nerve-centre of any university library because they contain the most up-to-date information on research and knowledge. Agbaje (2002) also concluded that serials constitute one of the most, if not the most important information resource of the information age. Serials are invaluable information materials for academic work. According to Akinbode (2011) "nearly all the disciplines of study make use of serials particularly the scholarly journals, as a primary means of communicating new research results, new theories, and new critical approaches". Most academic libraries, according to Akinbode (2011) restrict, at least, their current serials holdings and sometimes the whole collection to use in the library only so as to ensure that current issues are accessible and secured because missing issues are difficult to replace. Other libraries also restrict their serials to researchers. Aghadiuno, Agbo and Onyekweodiri's (2015) study of two university libraries in North-Central Nigeria regarding access to their serials collection found that the serials section are open to academic staff and postgraduate students.

To ensure effective use of serials, the needs of the users should be determined. Information from the patrons on their expectation of serials, as observed by Anunobi, Nwakwuo and Ezejiofor (2010), would no doubt make the library feel the pulse of the users. Tedd (2006) reports that journals with a practical bias appeared to be more patronised by graduate students of the University of Wales, Aberystwyth in their dissertations than more research-oriented journals with high impact factors. Bhat (2014) found that majority (80%) of faculty members of an engineering college in India make use of print periodicals in their teaching and for obtaining new knowledge in their field of expertise. Other users, however, use non-academic print serials for dual purposes of recreation and gaining new knowledge (Madukoma et al., 2013). It is, therefore, important for serial librarians to consider the eclectic uses of serials and make provision for diverse user interests in their collection development. While the use of serials by academics and researchers in developed countries is well-recognised, their use and acceptance by universities in developing countries are still mixed (Ahmed, 2011). Furthermore, the reliance on books for research information among student researchers and some faculty members in Africa is a worrying trend, as current research findings are available in serials. Ajala (2007) opines that serials are of little use than monographs to both undergraduate and postgraduate

students. On the contrary, Ajala (2007) found in another study that doctoral students found serials more useful because of their skill, experience and knowledge. These findings suggest the need for training and reorientation on the benefit of serials researchers to boost research capable of promoting development in African universities.

In studies where serial use was noted to be popular, several obstacles have impeded their use. Akinbode (2011) found that faculty members and postgraduate students in Nigeria spend more of their time reading publications in serials, such as scholarly journals and technical reports of specialised organisations and societies, than from books and monographs. For instance the Nigerian university of Agriculture Libraries, according to Salaam (2001), had not fared well in their provision of relevant and adequate journals for research and that this has affected their postgraduate students as they did not have sufficient access to their university libraries serials collection. The situation is not different from Ghana. The use of serial publications in Ghana has been reported by a number of researchers (Arkaifie, 1997; Kisiedu, 1999; Adika, 2003; and Dadzie 2005). These studies report low to average usage of serials in Ghanaian universities. Lawoe (2006) found that serials were moderately used by all categories of library users at the Kwame Nkrumah University of Science and Technology. Arkaifie (1997) recounts the gloomy state of serial collections in Ghanaian universities; remarking that "faculty members in academic libraries in Ghana still complain they do not have enough periodicals despite improvement in subscription level from the late 1980s." This has led to many universities in Ghana subscribing to electronic serials. According to Dadzie (2005), universities in Ghana provide access to databases of full-text journal articles and abstracts. Despite the availability of electronic resources in response to the need for more current journals, Dadzie (2005) observes that while usage of some internet resources is very high, the use of electronic journals is quite low in academic libraries. She attributes the low patronage to inadequate awareness of their existence. It may, therefore, be concluded that whether a library provides electronic or print journals, the most important factor for use is awareness and knowledge of these resources.

3. Methodology

This study made use of survey research methods. The study setting was the College of Technology Education (COLTEK), a satellite campus of the University of Education, Winneba. The campus was selected because no similar work in the area of this research has been published in the literature. Furthermore, the study site was accessible to the researcher thereby making data collection feasible. The population of the study consists of faculty members and graduate students. Faculty members were selected due to their need for current information in journals for research and publication activities. Similarly, graduate students were included in the study because they may also use researched information mostly found in journals to complete their theses and dissertations. The total population of graduate students in the study university was 97. Alreck and Settle (1985) are of the view that in ordinary conditions 10% of the total sample is adequate. However, ten percent (10%) of 97 was considered inadequate for a sample size, and as a result a census of the whole population was undertaken. The population of faculty members at COLTEK was 165 as at the time of conducting the study. Similarly, since the population of faculty members at COLTEK was not considered too large for the study, a census of faculty members at the campus was also used for the study.

A self-administered closed-ended questionnaire was designed for the study. The questionnaire consisted of four sections: Section A involved information on respondents' demographic data; section B comprised of questions on awareness of serial publications in the library; Section C covered use of serials by faculty and students; while Section D covered perception of the usefulness of serial publications in teaching and learning. The survey component of the study was conducted within a period of three weeks within the month of March 2014. Completed questionnaire by graduate students were collected immediately. However, for faculty members, the questionnaires were deposited in their official mail boxes and collected once it had been completed within the three week period. At the end of the survey, 64 (66%) students returned validly completed questionnaire. In respect of faculty, 109 questionnaires representing 66 per cent were retrieved for the study. Data was analysed using the statistical package for the social sciences (SPSS) and the findings presented in cross-tabulation form

4. Findings

Background of respondents: The demographic backgrounds of the respondents are presented in Tables 1 and 2.

Gender distribution of respondents: Respondents were asked to indicate their gender. Table 1 shows the gender distribution of the respondents.

Table 1: Gender Distribution of Respondents

Status	Gender				TOTAL
	Male		Female		
	F	(%)	F	%	
Postgraduate	32	62.7	19	37.3	51
Faculty	70	70.7	29	29.3	99

Source: Field Work, 2014

Gender distribution of respondents from Table 1 above shows that, 32 faculty members representing 62.7% and 67 graduate students representing 70.7% were males. On the other hand 19 postgraduate students and 28 faculty members representing 37.3% and 29.5% were females. Thus majority of respondents were males.

Faculty/Department of respondents: The study sought to identify the department to which the respondents belonged. The departmental affiliations of the respondents are presented in Table 1.2:

Table 2: Faculty/Department of Respondents

Faculty / Department	Status			
	Faculty		Postgraduate	
	F	%	F	%
Accounting	10	10.2	20	39.2
Management	18	18.4	30	58.8
Technology	30	30.6	0	0
ICT	20	20.4	0	0
Interdisciplinary Studies	19	19.4	1	2.0
Other	2	1.0	0	0
Total	99	100	51	100

Source: Field Work, 2014

From Table 2 it can be seen that 30 faculty representing 30.6% indicated Technology department. For the graduate student respondents, 30 representing 58.8% indicated the Department of Management. Only one graduate student respondent (2.0%) indicated Interdisciplinary Studies. No faculty member indicated Interdisciplinary Studies.

Awareness of serials among faculty and graduate students: To promote the use of any service, it is very crucial that awareness of that service is created (Bentil, 2011). It is against this background that respondents were asked to indicate their level of awareness of serial publications in the library. The responses given provide an insight into their level of awareness. It is evident from Table 3 that majority of faculty respondents (64) and over half of the postgraduate students (36) representing 64.6% and 70.6% respectively, indicated their awareness of the serials publications of the COLTEK Library. Faculty members intimated that they got to know about the publications through friends, notices, and the library website, while graduate students indicated that they got to know about them mainly through orientation and colleagues.

Table 3: Awareness of serials

Awareness	Status			
	Faculty		Postgraduate	
	F	%	F	%
Yes	64	64.6	36	70.6
No	33	33.3	15	29.4
No response	2	2.2	0	0
Total	99	100	51	100

Source: Field Work, 2014

Awareness of types of serials: Further inquiry was done to determine respondents' awareness of the various types of serials available in the library. For this reason, those who were aware of the serial collections were asked to indicate the various types of serials they were aware of (See Table 4).

Table 4: Awareness of the various types of serial

Serial Publications	AWARENESS							
	Faculty				Postgraduate			
	Yes		No		Yes		No	
	F	%	F	%	F	%	F	%
Journals	62	96.9	2	6.1	35	89.7	4	10.3
Newspapers	74	94.9	4	5.1	30	76.9	9	23.1
Magazines	38	48.7	40	51.3	19	48.7	20	51.3
Annual Reports	43	55.1	35	44.9	6	15.4	33	84.6

Source: Field Work, 2014

The findings revealed that 64 faculty members and 35 graduate students representing 82.1% and 89.7% respectively were aware of the journals in the library. Concerning the newspapers, 74 faculty members and 30 graduate students representing 94.9% and 76.9% respectively were aware of them. Respondents were aware of magazines and annual reports as 38 of faculty members representing 48.7% and 19 graduate students representing 48.7%. Forty-three faculty members and 6 graduate students representing 55.1% and 15.4% respective were aware of annual reports.

Frequency of use serials by faculty and students: Faculty and students are expected to make use of the publications available in the library for various academic exercises. For this reason, the respondents who used the serials were asked to indicate how often they used the materials as shown in the Table below:

From Table 5 above 23 faculty members representing 23.2% indicated that they use journals monthly while 36 representing 36.4% indicated that they never use them. Nineteen representing 19.2% indicated that they use proceedings once in a while and 49 representing 49.5% has never used it. They also indicated that 29 representing 29.3% used annual reports once in a while and 41 representing 41.4% had never used it. Twenty-four representing 24.2% indicated that they used magazines once in a while and 41 representing 41.4% indicated that they had never used it. Newspapers were mostly used by respondents who indicated 37 representing 41.6% used it daily while 32 representing 37.4% never used it.

Table 5: Frequency of use of serials by faculty members

Frequency of use	Faculty Type of serial Journal F	%	Proceedings F	%	Annual report F	%	Magazines F	%	News Papers F	%
Daily	1	1.0	-	-	-	-	-	-	37	37.4
Once a week	4	4.0	1	1.0	2	2.0	-	-	2	2.0
Twice a week	9	9.1%	1	1.0	1	1.0	3	3.0	2	2.0
Monthly	23	23.2	14	14.1	7	7.1	12	12.1	1	1.0
Once in a while	19	19.2	19	19.2	29	29.3	24	24.2	15	15.2
Never	36	36.4	49	49.5	41	41.4	41	41.4	32	32.3
No Response	7	7.1	15	15.2	19	19.2	19	19.2	10	10.1
Total	99	100	99	100	99	100	99	100	99	100

Source: Field Work, 2014

Table 6: Frequency of use of serials by graduate students

Freq. of use	Graduate students Type of serial Journal F	%	Proceedings F	%	Annual report F	%	Magazines F	%	News Papers F	%
Daily	-	-	1	2.0	-	-	-	-	20	39.2
Once a week	2	3.9	-	-	1	2.0	-	-	1	2.0
Twice a week	1	2.0	-	-	1	2.0	1	2.0	1	2.0
Monthly	7	13.7	2	3.9	2	3.9	5	9.8	1	2.0
Once in a while	23	45.1	3	5.9	2	3.9	15	29.4	6	11.8
Never	14	27.5	26	51.0	30	58.8	18	35.3	13	25.5
No Response	4	7.8	19	37.3	15	29.4	12	23.5	9	17.6
Total	51	100	51	100	51	100	51	100	51	100

Source: Field Work, 2014

Twenty-three graduate students representing 45.1% indicated that they use journals once in a while and 14 representing 27.5% indicated that they never use them. Three representing 5.9% indicated that they use proceedings once in a while and 26 representing 51.0% has never used it. They also indicated that 2 representing 3.9% used annual reports once in a while and 30 representing 58.8% had never used it. Fifteen students representing 29.4% indicated that they used magazines once in a while and 18 representing 35.3% indicated that they had never used it. Similar to faculty members, newspapers were mostly used by the graduate students who indicated that 20 representing 47.6% used it daily while 13 representing 31% never used it.

Usefulness of the serials to faculty and graduate students: Respondents were also asked to indicate the usefulness of the serial collections. This question was meant to elicit from both faculty members and students their perception on the role of serial resources in teaching and learning. Table 1.7 depicts their responses:

Table 7: Usefulness of the serial collections

Level of usefulness	Status			
	Faculty		Postgraduate	
	F	%	F	%
Very useful	49	49.5	17	33.3
Useful	17	17.2	15	29.4
Moderately useful	1	1.0	4	3.3
Quite useful	1	1.0	1	1.3
No response	31	31.3	14	27.5
Total	99	100	51	100

Source: Field Work, 2014

From this question, the findings revealed that 49 of faculty members and 17 of graduate students representing 49.5% and 33.3% respectively indicated that serial collections were very useful. In addition 17 (17.25%) faculty members also expressed optimism about the value of serials in their academic activities, while 15 (29.4%) of graduate students also indicated that these resources are important. On the other end of the spectrum, it is important to note that fairly insignificant respondents 2=faculty; 5=graduate students) indicate that serials are moderately and quite useful respectively. However, it is important to note the high number of faculty respondents (31=31.3%) and 14 graduate students (27.5%) who chose not to answer the question on the variable of usefulness. It may be surmised from this that these respondents have no basis of judging the usefulness of serials in their teaching and learning activities.

Discussion of Findings: One of the objectives of this study was to find out faculty members' and students' awareness of the serials available at the University Library. From the study it was found out that most of the respondents were aware of the serial publications in the library as well as the variety of serials on offer. This evidence supports the findings of Majid and Tan (2002) who studied the usage of information resources by computer engineering students in Nanyang Technology University in Singapore and found that majority of respondents were aware of the serial publications. However, about 35% of respondents indicated that they were not aware of the serial publications in the library. This accounted for the low daily patronage of the library as Torma and Vakkari (2004) affirm that knowledge and awareness of accessible resource in a library is a souring prediction of a library's incidence, exploitation and use. Similarly, Sanchez (2004) indicates that effective communication leads to awareness creation and understanding of products and services. The average response indicated that the respondents were very dissatisfied with the publicity of the serial collections since this was rarely undertaken.

Jubb, Rowlands & Nicholas (2013) opine that the value of the library is not influenced by its resources and facilities but also on the accomplishment of its exploitation and use. The findings of this study indicated that about half of the respondents used the serial publications. This evidence supports that of Brown, Lund and Walton (2007) who state that academic staff and researchers at Loughborough University in UK relied heavily on journals to support their research activities. This, in the researchers' view, could be due to the fact that serials usually contain current information and as such, are indispensable to academic work. Cottrell (2013) opines that journals are "the core of any academic pursuit", without which academic research and writing will be impossible. Again, on the specific purpose for which serials were used, it was discovered in the study that majority of the respondents used serial publications for research purposes. This supports the assertions of Ogunniyi, Akerele and Afolabi (2011) and Cottrell (2013) who opine that journals are useful for completing thesis and dissertations. Miholič and Južnič (2016) assert that journals are the basis for scientific research and communication. Afful-Broni, Owusu-Ansah and Takyi (2016) find in their study that graduate students use journals for their research projects. Alemna, Chifwepa and Rosenberg (2000) note that journals are used by researchers to identify possible topics in order to write future research and to publish the results of completed research. In spite of the relatively higher number of faculty and graduate students that use serials, it is important to note that it is significant that another half do not use the print serial collection. One challenge that may be envisaged for the low use of the serials collection may still be related to awareness of the serials collection and its possible benefits over online journals.

This study also demonstrates that both faculty and students considerably value and appreciate print serial resources in the academic library. This finding supports that of previous studies. The value of print resources is highlighted by Dilevko and Gottlieb (2002) who point to undergraduate students' positive perceptions of print periodicals in their academic work. The students described the advantages of periodicals as comprehensiveness (i.e ability to view all issues of the journal); accessibility (in contrast to e-journals which may rely on stable Internet connectivity and power); avoiding eye-strain (due to screen resolutions); high cost of printing e-journal articles if one cannot print; and permanence (as against e-journal articles which may be lost due to virus attack or some other mechanical fault). Aharony and Bar-Ilan (2016) confirm that students value academic print resources over electronic resources as print resources aid in higher comprehension of content. He suggests further that users prefer print information resources because they are modelled on the traditional approach to learning. These advantages must be highlighted by academic librarians to their all groups of users in their user education programmes. It is also important for libraries to point out to their users that not all kinds of electronic resources are preferable or relevant to all users (Kapoor, 2010; Dewan, 2012) and, as such, those who still find print resources, such as serials, useful must be encouraged by being made aware of, and updating and expanding the serial collection.

5. Conclusion and Recommendations

The purpose of the study was to examine the awareness and use of serials by graduate students and faculty members of the College of Technology Education, Kumasi (COLTEK) of the University of Education, Winneba. The study found that both faculty and graduate students were relatively aware but despite this awareness used serials relatively less frequently. Again the study has established that both faculty and students have significant positive perceptions on the usefulness of serials in their teaching, learning and research roles. However, a major drawback to serials usage is the relatively lower level of awareness among a section of the respondents. In order to sustain the continued positive perception and subsequent use of print serials, we make the following recommendations:

A. In spite of the proliferation of electronic journals, serial librarians must create awareness of print journals to provide choice for users, through innovative marketing techniques. Lawoe (2006), for instance, recommends intensive user education on serials, current awareness and selective dissemination of information (SDI) to improve serials usage in academic libraries. With SDI, serial librarians can compile a research profile of faculty members and provide them with "snapshots" of, for example, new journals or new issues of existing journals. This snapshot may be produced by making photocopies of the cover page and table of contents to selected faculty members who are interested in that research area. These snapshots can be broadcasted to students through social media platforms such as Whatsapp and Facebook.

B. Furthermore, in an effort to sustain the positive perception of serials, it may be necessary for academic librarians in this institution to consider adopting outcome measures to demonstrate the value of serials. There are a number of ideas on demonstrating academic library value (Blackwell, 2014). Citing the author Oakleaf, Blackwell suggests that academic libraries can enhance the positive perception of their serials collection by establishing what users do with the contents and how this use translates into measurable outcomes. Some of these outcomes include how the use of serials supports the wider institutional goals. These include increased student recruitment and enrolment, retention, career success, grade point averages, etc. For instance, librarians must be able to demonstrate, clearly, how the use of serials helps students cut down on cost through the provision of required readings per semester, without which the student will spend more on books. This evidence can result in student retention and justify the continued investment in serials. Finally, librarians must demonstrate the legacy advantage of print serials, as opposed to electronic serials which are subject to the pitfalls of technology (Dilevko and Gottlieb, 2002). Librarians must, therefore, enhance and increase their print serial collection as increased access to scholarly resources leads to improved research output of researchers (Miholič & Južnič, 2016).

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