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Privatization of the Utilities Sector of Abu Dhabi, UAE

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Abstract
This paper investigated the critical factors in the implementation of privatization using the qualitative method. The utilities sector of Abu Dhabi, with its long experience in privatization, served as the research context. The participants were selected using purposive sampling and their key insights were drawn out using the semi-structured interview. The findings showed that the unique experience of privatization in the utilities sector was largely inspired by the strong vision of the leader. This was backstopped by a number of factors that were critical to its implementation to generate, a mix of sector-level, community-level, and country-level benefits.
Keywords: privatization, utilities, single buyer, water-electricity nexus

1. Introduction

One of the areas of economic reform in the past decades was the adoption of privatization as an instrument of economic policy by many countries. This was not only seen in first world countries but in developing countries and nations with transition economies as well (Nellis,2012). Today, there is no doubt that privatization is one of the significant economic and political strategies shaping the global economic landscape (Guriev & Megginson, 2005). What differs among countries is the pace at which privatization is being adopted and institutionalized (Megginson & Netter, 2001). Whereas the Western world is far ahead in the practice of privatization, the privatization experiences of Arab countries indicate that they are lagging behind. With the increasing momentum of privatization worldwide, Arab countries are no longer faced with the choice of whether to privatize or not. Rather, the more important question is what and how to privatize their state-owned enterprises while taking cognizance of the lessons from the privatization practices and experiences of countries in the global and region contexts (Shehadi, 2002).

According to the OECD (2013), state-owned enterprises (SOEs) are an important feature of the economic landscape in the MENA region. It had been noted though that SOEs in the region are often charged with developmental mandates that are beyond their stated official objectives. Hence SOEs are generally perceived to be inefficient and subjected to sub-optimal governance arrangements. Moreover, their contribution has not been systematically investigated.. In comparison to developed countries, developing countries, and transitional economies, MENA countries remained unexplored relative to their privatization initiatives and if ever privatized companies are included in samples of international studies, their participation is but fragmentary (Nheri, 2014).

The past five years had witnessed a renewed interest in using SOEs as anchors of national industrialization and competitiveness strategies in the region (OECD.2005). Considering that the size of the SOE sectors in the region is unlikely to decline significantly, an evaluation of the effectiveness of these companies is necessary to assess the efficiency of the state in the marketplace. For the purpose of policy formulation, an examination of the government's readiness to efficiently implement privatization in order to optimize its contribution to the economy needs to be looked into (OECD 2010).

For governments in the Middle East, being late in the game of privatization allows them to draw out a lot of lessons from privatization initiatives elsewhere. Adopting the quick formula of copy and paste however is a sure recipe for failure. What makes privatization in the Middle East unique is that their circumstances vary from those of developed and developing countries primarily when it comes to the drivers of privatization in the context of their culture, history, and economic development (Afridi et al.,2015). Whereas other countries are driven to privatize in response to government debt, this is not so in the Middle East. Rather privatization is a means of getting access of private know-how in many forms (Al Hashemi, 2016). Middle East countries are not cash-strapped and do not see the need to make trade-offs between internal fund raising and long-term structural reforms. The privileged case of the Middle East is reflected in the situation of Abu Dhabi which makes it a good case for understanding the specific political, social, financial, legal and other attributes typical to the Middle East that informs the policy choices on privatization.

In Abu Dhabi, the double-digit increase in the demand for electricity and water in the past few years is expected to continue seeing rapid growth in the coming years. To this effect, H.H. General Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi was quoted by Parmigiani (2015:25) in his statement that "water is more important than oil for the UAE. We are pre-occupied with this major issue." In GCC states, access to free or cheap water and energy has become an undisputed right. In addressing this demand, Abu Dhabi

has entered into contracts with private power companies to participate in its energy sector for a number of years. It established Abu Dhabi Water and Electricity Authority (ADWEA) pursuant to the Abu Dhabi Electricity Law, which is now responsible for all matters relating to formulation, development and implementation of government policy relative to the electricity sector, including its privatization. Currently, its larger production capacity and extensive distribution network had allowed ADWEA to assist the other Emirates in meeting their power demand.

The unique demographics of the place coupled with the growing demand of the population, the current adjustments in local oil prices, and the mandate of ADWEA to supply basic utilities to the Emirate and to the country motivated the researcher to look at how privatization is being implemented and how it contributes in addressing the dynamics of supply and demand, enhance the efficiency of government performance, stimulate FDI, and create benefits from the transfer of knowledge. This constitutes a good case for a study because privatization in Abu Dhabi still remains to be under-researched. It is in this spirit that this study on the privatization of the utilities sector of Abu Dhabi was undertaken. Since there are no established metrics yet to gauge the success of privatization, in general, and the utilities sector, in particular, the study took a qualitative turn in an attempt to contribute towards this end. Lessons learned from the successful implementation of privatization can be used to inform the rest of the Arab world that are looking forward to embark on a similar initiative.

2. Methodology

The researcher adopted the ontological position that reality and truth are constructed by humans (Mack, 2010) and the epistemological stance that knowledge is socially constructed by the participants (Creswell, 2008) hence the adoption of constructivism as the philosophical underpinning this study. Based on this philosophy, the researcher used the inductive approach which allowed him to start with detailed observations and move towards more abstract generalizations and ideas (Neumann, 2003). Consistent with constructivist underpinning of the study, the researcher used the qualitative method of investigation. The use of the qualitative method was premised on the assumption that issues relating to company competitiveness can be best "solved from inside the organization, no matter how tough the environment becomes" (Navarro-Meneses, et al., 2015:1). Internal stakeholders are now recognized as legitimate actors in organizational problem solving and decision making (Eskerod et al., 2016) and empowering the voice of stakeholders can surface out meanings which have previously been submerged (Calton & Kurland, 1996). Furthermore, the method is consistent with the philosophy, approach, and strategy adopted in the study.

This study involved the elements of exploration, description, and explanation. In which case, in-depth and structured interviews are most appropriate to use. Since the study also involved the necessity of establishing personal contact, the researcher opted to use the semi-structured interview which combined the elements of the in-depth and structured interview. The study made use of purposive sampling in selecting the participants of the study. The rationale for choosing this technique is that the study required the knowledge of those who were and are currently involved in the privatization of the utilities sector. Accordingly, the researcher sought the assistance of the ADWEA in selecting the study participants. On the whole, twenty-three managers and executives gave their consent to participate in the study. Of the total number of respondents, five are from the government sector and eighteen are from the private Independent Water and Power Producing companies (IWPPs).

The researcher made use of thematic analysis of the narratives of the interviews and secondary data to establish the context, support, and validate the answers provided in order to adequately answer the research questions. Accordingly, this entailed the use of narrative reading, document analysis, and inductive content analysis. Narrative reading involved focused reading that pays attention to the processes of co-construction of reality (Guba & Lincoln, 1994). The text served as the narrative that provided a stage for the research participants to be air their perceptions, and beliefs. The inductive content analysis involved open coding, creating categories, and abstraction.

3. Results and Discussion

The government participants in the study got involved in the privatization initiative of the government in different capacities. Law No. 2 which created the ADWEA also saw the establishment of the Privatization Directorate. The Directorate is the arm of ADWEA responsible for carrying out the directives of privatization (Afridi et al.,2015). The Directorate played a vital role in ADWEA and had to be sufficiently staffed. Its establishment created job opportunities that attracted expertise from outside ADWEA. The Directorate also opened opportunities for its existing ADWEA personnel to be part of the privatization drive because of their familiarity with the systems and processes employed by the authority. This led to more insiders from joining the Directorate. This created cross-functional teams that were later responsible for various functions and activities related to privatization.

The expatriate participants revealed that they joined the ADWEA at a later time but were involved in the initial phases of privatization in their private capacities as advisers. The early years of the privatization of the

utilities sector relied, among others, on technical expertise and industry experience. Since privatization was still in its infancy in 2009, ADWEA had no internal resources then who had global experience on the technical aspects of privatization hence had to depend on trusted technical advice coming from outside experts, someone with the experience on the technical side of privatization at the same time familiar with ADWEA.

It was noted that the participants from the government sector were already involved in the privatization of the utilities sector from the start of the program. In comparison, the participants from the partner private IWPPs became involved as soon as their companies emerged as the winning bidders. The participants from the IWPPs soon took their roles as Executive Managing Directors, Managing Directors, Technical Directors, and Commercial and Financial Managers. Eight among the participants are expatriates and the remaining ten are UAE nationals. Among the nationals, it was noted that they were originally with the government utilities sector in 2006 and later transferred to the private IWPPS, hence their experience with the privatized companies span a period of 9 to 10 years.

For the expatriates, their experiences in privatization varied in terms of the number of years and involvement in countries where privatization took place. The most number of years of experience is 26 years and the least is 2 years. With the exception of one participant who is a Technical Director, all the others are Executive Managing Directors (EMD) of the IWPPs. Most of the participants reported that they were either recruited or headhunted before being appointed to their current position. Technically they were recruited by their companies and eventually appointed by the Board of Directors to their positions. The majority of the participants had previous experience in privatization in countries outside the UAE which include the UK, Netherlands, Malaysia, Pakistan, Turkey, Oman, and Bahrain.

3.1. Implementation of Privatization

The privatization of the utilities sector in Abu Dhabi was largely an internally motivated initiative that was driven by the vision of the leader. One of the study participants explained that in a country such as Abu Dhabi, the leadership is a key factor hence privatization was made easy because it had the political support from the top. He further explained that the leadership had the vision to look beyond its budget surplus and understood well that the benefits from the private sector went way beyond delivery of finance. This made the case of the privatization in Abu Dhabi a unique one. Weak leadership can be a hindrance to privatization as shown in the case of Algeria. But even strong support by a king or president can lead to the failure of privatization as in the cases of Morocco and Tunisia, respectively. In Morocco, the king supported privatization but the substantial gains derived from the process mainly served the political elites rather than benefitting the population of the country. In the case of Tunisia, the president and his government gave full support to privatization but the business environment was not prepared to support the process hence privatization was undertaken at the expense of the public sector and its subsidies (Biygautane & Lahouel, 2011).

The conditions in Abu Dhabi such as its vast capital resources, business-friendly environment, transparent and accountable government, and the inspiration provided by the leader's vision to continue to create a confident, secure society and to build a sustainable, open and globally competitive economy all shaped the determination that paved the way for successfully implementing privatization in the Emirate. In terms of the actual implementation of privatization, the participants referred to the adoption of "a model from the global IPP sector" or using an "international model to develop the privatization scheme." For the other participants, they referred to this as the IWPP model. According to Saif (2012:14), IWPP is a "financing and project approach that generally uses Build-Operate-Transfer (BOT) or Build-Operate-Own (BOO) model but is applied specifically to joint water and power projects." The IWPP is an option to resolve the "twin issues of water and power provision" (Alsulaiman, et al., 2015:1).

The Regulation and Supervision Bureau however, calls the model the Single Buyer Model (RSB 2013). The model was set in motion when the utilities sector sector in Abu Dhabi was unbundled in 1999 and later restructured upon the creation of the ADWEA, ADWEC, TRANSCO, and the Abu Dhabi and Al Ain Distribution Companies, all of which are 100% government-owned. After its inception, ADWEA entered into joint ventures with foreign investors who were allowed a 40% ownership of the partnership. IWPPs operate under signed power and water purchase agreement (PWPA) of 20 years with ADWEC as the sole buyer of their products. The Regulation and Supervisory Bureau issues the operating licenses to the IWPPs and monitors the maintenance of these licenses. In contrast, the traditional model used in Abu Dhabi was the vertically-integrated co-generation of water and power where only one entity owned and took responsibility for the whole supply chain

In the conceptual template of the Single Buyer Model, the electric power industry is no longer vertically integrated because of the entrance of new players: the independent power producers (IPPs). The IPPs came into the power generation landscape in the 1990s in several developing countries. The role of the IPPs was to generate electricity and sell this to the national power company of the country. In one version of the model, there is a single entity that acts as the buyer and competition only occur at the generation level. The other version is

the disaggregation of any generation capacity including distribution and retail. The purchasing agency or single buyer then sell the product to the distribution company which in turn sells to the consumers (Kasim, 2014).

The Abu Dhabi Single Buyer Model is a unique model in which the energy market is extensively powered by IPPs and functions under an independent regulator. There are considerable government control and oversight. Having a majority stake in the generation and a single buyer model, competition is limited except in the tendering of new generation plant. The Single Buyer Model implemented in Abu Dhabi Sector eliminates competitive pool arrangement because all production output is purchased by the Single Buyer (ADWEC). The Regulations and Supervision Bureau explained that the majority of large-scale production companies are privately operated and partly owned (40%) by foreign investors. All electricity and water output is sold to the Abu Dhabi Water and Electricity Company (ADWEC), known as the Single Buyer. This model creates a high level of certainty between producers and ADWEC through long-term (typically 20 years) Power and Water Purchase Agreements (PWPAs), more commonly referred to as 'off-take agreements.' The Bureau regulates only ADWEC and each project company.

On the whole, the utilities sector in Abu Dhabi has demonstrated dramatic changes in the past 15 years with improved provision of services to the populace. Partial privatization has also reduced disruptions and inefficiencies in both networks have also been greatly reduced under the new model. The privatization of the utilities sector in Abu Dhabi is implemented through the single buyer model with a partial liberalization of production with totally government-owned transmission and distribution. It is quite unique as noted by USAID (2012) as it hosts 50% of the national demand and 35% of the national demand with 96% of power generation coming from the IPPs.

A significant aspect of the implementation of privatization is the legal framework. Law 2 of 1998 Concerning the reorganization of the electricity sector has been effectively crafted based on related legislations. One such legislation was the Crown Prince Decision which did not only echo the leader's vision on the economic development of the Emirate but also legally institutionalized these as guiding principles in crafting the law on the privatization of the utilities sector. Through the law, the leader's vision is not a matter of rhetoric but a reflection of political will. At best, privatization in Abu Dhabi is vision-driven which makes it uniquely endemic to the Emirate.

Despite the fact that ADWEA and its subsidiaries are the dominant players, transparent regulation and functioning characterize the vertically integrated company. According to Parmigiani (2015), end-user water tariffs are published by the regulators and ADWEC openly calculates the bulk water tariffs for distribution. This system does not only add transparency but shows stability and predictability as well. This practice helps create a healthy business and investment climate. This system which is not based on a supply and demand equation which guarantees increased revenues for IWPPs hence increasing the incentives to invest in the utilities sector.

One feature of privatization in Abu Dhabi which makes it different from other privatization drives is being able to get the best expertise not on the basis the technical advantage that gives the IWPP a competitive edge over the rest but by allowing the private investor to drive the design so that Abu Dhabi sector gets the very best solution at the lowest cost. As one of the participants reported it is "reducing rules and regulation to let the market decide what is best is key." An added attraction in the model is that the 11% return of investment guaranteed in the contract is generating strong competition for IWPP bids. All these features have made the IPPs and the financial sectors readily embrace the Single Buyer Model in Abu Dhabi.

On the whole, privatization was implemented using the single buyer models which involved a water–energy nexus approach (Paul et al.,2015). This saw the harmonization of policies, strategies and key action plans among interrelated sectors to reduce environmental impacts and optimize human benefits.

3.2. Alignment

According to the participants, measures for ensuring the alignment of the activities and processes of the IWPPs with the economic goals of the emirate were built into the pre-operational phase and operational phases of the process. In the pre-operational phase, templates for competitive bidding, models of various project agreements and project documents have been created to enable alignment of processes and activities. These are reflected in the power purchase agreements, the award of contracts, ownership structure, financing, and contractual arrangements already in place. The following information provided by the RSB and ADWEA provides the details to the participants' views.

Power and water purchase agreement. According to the RSB (2013), there are two main components of ADWEC's payments to IWPPs under the power and water purchase agreements (PWPA) separately for electricity and water:

- *Capacity (or availability) payments covering the fixed cost of the plant which includes return on capital, depreciation, and fixed operating and maintenance cost. This is to be paid after the plant is made available for production regardless of the bulk of the output to be produced.*
- *Output (or energy or water) payments for variable O&M costs, payable only for the output (water or*

electricity) actually produced by the plant.

Accordingly, PWPA payment rates are annually indexed against the US and UAE inflation rate or the USD-AED exchange rate. Fuel suppliers are paid directly by ADWEC for the fuel consumed by each IWPP. IWPPs are incentivised for fuel efficiency consumption by a bonus-penalty mechanism under the PWPAs on the basis of benchmarks set or by reference heat rates.

Capacity payments and fuel costs account for about 90% of the production cost shouldered by ADWEC. The PWPAs also require ADWEC to pay supplemental payments to the IWPPs such as start-up and shut-down costs. In addition, ADWEC is also required under the PWPAs to pay for shared facility cost whenever applicable. PWPAs also provides invoicing and payment of liquidated damages for delay in performance and interests on late payments.

Award of contract. IWPPs develop generation and desalination projects on a build, own and operate (BOO) basis, where projects are awarded through a competitive bidding process.The primary bidding criterion for greenfield projects is the lowest level of tariff for the sale of water and electricity to ADWEC. For brownfield projects, the criterion is the highest asset value of given tariffs. The ADWEA manages the bidding process through pre-qualification of bidders, issues the request for proposals, and selection of the successful bidder for the projects. The successful bidder can be a single company or a consortium of companies.

Ownership structure. A successful bidder and a local holding company establish an IWPP as a joint stock company. The successful bidder owns 40% of the share capital of the IWPP and 60 % is owned by the local holding company. The local holding company is established by ADWEA that is entitled to 10% ownership is 10% while 90 % owned by Abu Dhabi National Energy Company(Taqa).

Taqa, on the other hand, is owned by ADWEA (51%) and the government-affiliated Farmer's Fund (24.1%). The remaining share of 24.9% is owned by private stakeholders who are exclusively UAE nationals. Taqa is one of the largest companies listed on the Abu Dhabi stock exchange.

Any request for proposals issued by ADWEA for any IWPP contains the draft of the Shareholders Agreement between a successful bidder and the local holding company.This governs the relationship between the shareholders. There are seven members who comprise the Board of Directors of the IWPP, four of whom are appointed by the local holding company and three by the successful bidder.

By authority of the Board of Directors, operational management of the IWPP is granted to an executive managing director (EMD) who is a nominated member of the Board nominated by the successful bidder and appointed by resolution of the Board of Directors.

Financing. The source of funding for the project comes from a combination of debt, equity, or internally generated net cash flows of the IWPP. The arrangement for debt is on a non-recourse project financing basis. In this arrangement, the successful bidder is responsible for taking care of the required financing and negotiating financing arrangement with the lenders. The debt to equity ratio is 80:20 which may be raised depending on the capital market. Interest rates are paid by the IWPPs based on arrangements (RSB, 2013).

Contractual arrangement. The RSB (2013) provides a simplified typical contractual arrangement for an IWPP shown in Figure 16, the risk is allocated to the best party thereby making the IWPP a low-risk transaction.

Anent the PWPA, and agreements such as shareholder and financing shown in the figures, an IWPP is also bound to a number of contracts such as for as EPC Contract, O&M Contract, and Land Lease Agreement. This is because of the optimal allocation of risks between the parties, the IWPP is considered a low-risk transaction.

The RSB (2013) describes the engineering, procurement, and construction contract (EPC) as a lump sum, date-specific, and turnkey contract between the IWPP and its EPC contractors for the development of the project. During the bidding process, each IWPP is required to specify its EPC contractor and sub-contractor together with the required detailed requirements. This includes proven track record, utilization of good engineering practices in design and in implementing the construction of power and desalination plants. In addition, the proposed equipment should be state-of-the-art and manufactured by a reputable company with sufficient operating experience in the manufacture of the proposed equipment. Moreover, the EPC contract should reflect the detailed designs, specifications, the scope of work, target dates, and project cost. Provisions for liquidated damages and other remedies to compensate the IWPPfor delays and variants from the terms are also provided for. There is no contractual relationship whatsoever between ADWEC and any of the contractors of the IWPP.

In terms of the Land Lease Agreement, ADWEA acquires the land intended for the project. In which case, the IWPP is granted an exclusive long-term leasehold on the land including easement rights for access to the land during the project duration. The Land Lease Agreement stipulates the responsibilities of ADWEA and the IWPP in relation to the use of the land and environmental impacts. Furthermore, it stipulates the conditions for the surrender of the land after the project is terminated. This puts the responsibility on the IWPP of returning back the land in a surface to grade condition (RSB, 2013).

Operating and maintaining the project is governed by the O&M Contract. The O&M contractor may be a third party a subsidiary of the shareholders of the IWPP. During the bidding process, the IWPP specifies its O&M contractor and the corresponding references and details of their experiences. A stipulation in the O &M

contract between the IWPP and its O&M contractor includes services relative to all maintenance, overhaul and special repairs made by the O&M contractor based on a fixed rate plus escalation structure or on a cost plus fee pricing structure. The liabilities of the parties under the O&M Contract are determined based on the assessment of the actual power and water availability and actual fuel consumption incurred by the O&M contractor vis-à-vis the specified targets in the PWPA (RSB,2013).

The foregoing pre-operational arrangements were diligently crafted to implement the goals of privatization to bring in the best expertise in the sector. It also guarantees the mutual benefits between the government and the private sector and secures the goal of providing cheap energy to the community of Abu Dhabi.

3.3. Benefits of the Privatization of the Utilities Sector

The benefits of privatization as perceived by the participants and the resulting benefits in relation to the objectives of privatization provided by ADWEA were categorized and summarized as follows:

Efficiency gains. For more than 15 years and nine IWWP companies, the single buyer model accounts for more than 95% of generation and has provided substantial benefits for both the government and the public sector. The RBS's regulatory mandate resulted to a robust network at the transmission and generation levels at a competitive cost. This is supported by an extensive capital investment program which makes the network secure and reliable.

According to the ADWEA, the losses in transmission do not exceed 2%. The reduced cost of transmission and distribution also reflect added gains in efficiency. Despite the escalation in demand, the unit cost of electricity is expected to be about 30% in 2018 compared to its 1999 level while transmission and distribution of water are expected to be reduced by 20% for the same target year. This demonstrates the efficient capital deployment along the power and water network. For the consumers, this translates to better and prompt services. On the whole, privatization has succeeded in contributing to macroeconomic growth as a result of microeconomic efficiency.

According to Wood (2004), there is a strong case in the literature in the late 80s to support that privatization can attain efficiency gains for firms. He noted that efficiency is clearly improved in competitive environments. It is however uncertain whether private ownership has greater advantage to state ownership The most critical factor to ensure efficiency gains is regulatory policy. This can be affirmed in the case of the privatization of the utilities sector in Abu Dhabi as the robust framework framework is favorable to efficiency gains.

Gains from strategic investors. Privatization enables the host country to gain from the global expertise and experience of strategic investors. The provisions set by the ADWEA for the bidding process stipulate requirements that result to the inflow of the best expertise and technology in the privatization of the utilities sector. This means that the successful bidders bring in not only new human resources and modern technology but also operational management techniques, structures, and processes. Existing employees can learn from the foreign company and improve their skills through training. This leads to further reform in the sector.

Another benefit from the inflow of strategic investors is the improvement of the existing infrastructure and the building of new generation and desalination plants that can be strategically located to prevent losses. Strategic investors also provide access to new sources of private capital without recourse to the use of government funds. The introduction of innovative commercial practices by strategic investors can also help in improving the efficiency of doing business in the sector. Sound regulatory oversight by the RSB can reinforce balancing the interest of both the government and the IWPPs. On the whole strategic investors can be drivers of sectoral reforms and rationalization required to improve system efficiency. The most direct effect of privatization from strategic investors is foreign direct investments (FDI). Increased involvement of the private sector as a component oft of diversification is related to attracting FDI. Together with capital, FDI inflow also facilitates job creation, innovative technology and management best practices and others that are instrumental in expanding and improving the economy (Hvidt, 2013).

Mukherjee and Suetrong (2009) demonstrated that FDIs are higher in privatization that provides incentive contracts as compared to no contract at all. This affirms the findings of the study as incentive contracts offered to private investors continue to attract private companies to invest in the UAE in general and the utilities sector, in particular. This has always been the advocacy of the IMF to promote privatization in highly indebted countries in order to generate funds for structural reforms (Vila and Peters, 2016).

Knowledge transfer is one of the motivations for privatizing (Verbrugge and Megginson,1999; Okten and Arin,2001) but studies on the effect of privatization on actual knowledge transfer are rare. Since private acquisitions in a foreign country show, some traces of privatization, a study Piscetello and Rabbiosi (2003) showed that there is a transfer of knowledge, R&D capabilities, and managerial skills from the foreign company to the acquired company manned by local talents. They found that the transfer was faster in low-tech sectors compared to high-tech sectors where the transfer takes some time.

Impact on the financial health of the sector. Ochieng and Ahmed (2015) cited that according to Megginson (2010), the size and efficiency of financial markets have been reshaped and the practice of corporate finance have been altered by privatization. Overall, privatization has impacted the returns to governments implementing

privatization as well as their private partners. The authors also pointed out that good fiscal policy that streamlined financial procedures added to the financial performance of the industry.

The impact on the financial health of the sector can be seen in terms of measures such as liquidity, solvency, profitability, and financial effectiveness. Although these were not directly measured in the study, the views aired by the participants during the interviews were inclined towards these. Liquidity is the ability of a business to meet financial obligations without disrupting normal business operations (Ochieng & Ahmed). By all indications, putting the sole buyer in the hands of the ADWEC guarantees that financial obligations on the sales of power and water are met on time. Solvency is the credit-worthiness of the company (Ochieng & Ahmed, 2014). The literature cites that generally, privatization improved firm performance (Megginson, et al., 1994). Boubakri and Cosset(1998) found out later that performance improvements were generally even larger than those documented by Megginson, Nash, and van Randenborgh (1994). More of the firms privatized in the 1990s were from telecoms and D'Souza and Megginson (1999) found that privatization significantly improved firm performance in these areas. Other positive consequences noted after privatization in non-transition economies include the positive initial return to IPO investors (Verbrugge and Megginson 1999), and technology shift (Okten and Arin 2001). These findings of the study tend to affirm these positive effects of privatization.

The findings also affirm the findings of Berg, et al.(1999) who noted the preeminence of structural reforms after privatization. Furthermore, it was observed that economic performance gains come after deep privatization or institutional reforms have been instituted (Zinnes, et al., 2001).The more concentrated the post-privatization ownership structure, the higher is the firm's profitability and market valuation (Claessens et al.,1997).

Escalating the performance benchmark. According to PRIME Institute (2014), The components of performance benchmarks for privatization include governance, operation management, financial performance, and commercial performance. In terms of governance, indicators such include leadership, strategy, organization, and human resource management.

It is evident that the unbundling of the utilities sector created regulatory authorities, managing bodies, and operational entities that rationalized the structure for privatization. The embodiment of the vision of the leader in the development roadmap of the Emirate and its diligent implementation is a concrete manifestation of political will and good governance. Privatization also led to the development of a workable model for privatization in the Emirate. In terms of operation management, indicators include technical, engineering and other operational issues. As earlier mentioned, privatization has resulted in the inflow and transfer of knowledge, expertise, and technology which has significantly improved the technical and managerial skills of existing manpower through training. Financial performance includes financial reports, alignment of financial performance with organizational strategic needs and good corporate practices. Privatization has led to transparency and accountability not only in the practice of governance but also in reporting to the public. The institutionalized pre-operational and operational arrangements between the ADWEA and IWPPs ensures that both operational and financial performances are aligned to the strategic goals for privatization. Commercial management includes billing processes, customer service, and communication. The evidence for this indicator in terms of the Emirate comes in the form of the prompt and uninterrupted services provided to the customers and the outreach program of providing utilities to the farthest localities of the Emirate.

In terms of the goal of attracting world-class private investors to Abu Dhabi, the world's leading names in the power and water sectors are current IWPP partners of the ADWEA. These companies include CMS, Suez Energy, International Power, Total, Marubeni, Mitsui, Tepco, Tanjong, JGC, SembCorp Utilities, SUMITOMO, and KEPCO. Through the years, over US$3.8 billion of equity has been invested (of which) in the power and water sector. Of this amount, US$1.52 billion have been raised internationally. An added benefit is that approximately US$15 billion for project financing has been raised with limited recourse to the sponsors and without recourse to Abu Dhabi Government. In terms of developing the domestic investor base, an IPO option is enshrined in all the Emirate of Abu Dhabi IWPPs. Stock options offered to UAE nationals also open the opportunity for the community to be responsible stakeholders in privatization. This comes with the development of TAQA as a world class power investment vehicle. In terms of developing employment opportunities and training for UAE nationals, all of the IWPPs include Emiratization as one of their key performance indicators which increases the opportunity of UAE nationals to be trained and employed in the various specialization of the power and water industry and acquire globally competitive skills of the utilities sector. In terms of maximizing revenues from Government asset sale, it has been reported that over US$5.3 billion has been raised from the proceeds of the sale of Government-owned assets (ADWEA, 2012).

3.4. Lessons Learned

Privatization as a strategy intends to improve service reliability and overall efficiency through the inflow of private capital, global knowledge and expertise, new management skills, and state- of- the-art technology that foster policy reforms that promote further rationalization of the sector. In its implementation, it comes in many forms employing various approaches and strategies. In a study on the international experience of privatization, it

was noted that there is no single model to emulate. To this effect, every privatization effort is unique in itself. The lessons learned presented in this section are drawn from the Abu experience.

Strong political will. The most significant driver of privatization in the Emirate of Abu Dhabi is the vision of the leader which is enshrined in Abu Dhabi Vision 2030. As demonstrated, the leader's vision is not a matter of rhetoric but a reflection of strong political will and commitment to the develop the Emirate. Such vision and commitment act as a guiding star that lights the roadmap that leads the government towards its realization. At best, privatization in Abu Dhabi is vision-driven which makes it uniquely endemic to the Emirate.

Government support. Privatization of the utilities sector in Abu Dhabi was able to attain its goals because of the convergence of support from different government institutions. This was attested to by those who participated in the initial stages of privatization who experienced that the transition was smooth because of massive support provided by the government.

Planning is the key. This was how one of the participants in the study articulated his view of the most important lessons learned in the privatization of the utilities sector in Abu Dhabi. This is also quite evident in the documents presented in the study that traced how Abu Dhabi Vision 2030 came about. Upon its announcement, the Crown Prince mobilized the proper authorities to come up with a long-term economic road for the Emirate that delivers upon the vision of the leader. Thereupon, Abu Dhabi 2030 was formulated based on Policy Agenda 2007-2008 which among others provided for developing a partnership with the private sector.

Setting appropriate privatization objectives. The goals of privatization were dovetailed with the overall development goals to attain the vision of the Emirate. On the basis of the sector's goals, the appropriate objectives were set that considered the intent of the vision but defined in the context of the utilities sector. In this manner, the attainment of the objectives in the micro-level will contribute to goal attainment at the macro-level.

Alignment. One of the most significant factors in the privatization efforts of the utilities sector in Abu Dhabi is the alignment of policies and strategies, structures and functions, and processes and activities with the overall goals of privatization. This is the result of diligent planning and the creation of the proper authorities that oversee, regulate, and monitor both the pre-operational and operational stages of privatization to ensure optimum alignment.

Stable, transparent legal and regulatory framework. For one, the success of privatization in Abu Dhabi is one account of a strong legal and regulatory framework. The laws enacted are strong and binding and are subject to constant review to keep it updated with global standards as evinced in the amendments introduced to the Electricity and Water Laws. The mandates of the regulatory bodies likewise keep the balance of interest of the government and its private partners

Willingness to learn. The road towards privatization in Abu Dhabi would not have been that smooth if not for the favorable attitude of the government to learn from the experts. Without a doubt, private consultants and foreign experts played a tremendous role in helping the government set the stage for privatization in the onset. This willingness to learn has paved the way for knowledge transfer which has significantly benefitted the sector.

Favorable incentives. Attracting international strategic investors is critical to achieving privatization objectives. As shown in the case of Abu Dhabi, the enthusiasm of private companies to invest in Abu Dhabi's utilities sector was not dampened by the economic downturn of 2008 and 2009. This is because of the stability of the Emirate and its capacity to provide favorable incentives to private investors.

Risk management. One contributory factor attracting private investment is the low-risk environment. As shown, the sound policies crafted by the sector, openness, transparency, and accountability, and the regulation of private assets all contribute to attaining the privatization goals in the Emirate.

Human capital development. The benefit of privatization to the community through Emiratization vis a viz productive way of developing the nation's human capital. Emiratization is a part of the performance indicators of the IWWPs and this has created the opportunity for high-value employment for UAE nationals. Part of the success of privatization in the Emirate is that it balances interests between private investors and the government without losing sight of the social agenda of providing the best employment opportunities to its citizens.

4. Conclusions

Based on the findings of the study, the following conclusions were drawn:

The implementation of privatization in Abu Dhabi was driven by the leader’s vision which is embodied in Abu Dhabi Vision 2030. The privatization of the utilities sector is supported by a robust legal framework that resulted in the unbundling of the sector and the creation of various entities that serve the sector. The privatization of the utilities sector in Abu Dhabi was implemented through the single buyer model with a partial liberalization of production and totally government-owned transmission and distribution. Implementation of privatization of the utilities sector in Abu Dhabi is shaped by critical factors that account for its current success. This includes a strong legal and regulatory framework, strategic locations of water and power plants, low-risk profile, transparency of regulators, and guaranteed government subsidies. It involves a water–energy nexus approach that is characterized by the harmonization of policies, strategies and key action plans among interrelated sectors

to reduce environmental impacts and optimize human benefits.

The alignment of the processes and activities of the sector to the economic vision of the Emirate is ensured by built-in pre-operational and operational strategies designed for the sector. In the pre-operational phase, templates for competitive bidding, models of various project agreements and project documents have been created to enable alignment of processes and activities at the level of operations.

With the current state and future outlook of the utilities sector, massive benefits have been derived from the privatization of the utilities sector of Abu Dhabi. These benefits can be seen in terms of the community level, sector level, and country level gains. End-users benefit from high-quality prompt services and the continuous and uninterrupted supply of electricity and water at a competitive world class price. Since 1999, the community has benefitted from energy and water security with ensured reliable supply concomitant to the period of the fastest economic growth of the Emirate.

On the whole, the partial privatization of the utilities sector is robustly contributing to the realization of the leader's vision for the economic development of the Emirate. The series of legislation that culminated in the creation of ADWEA and beyond institutionalized a framework for *enhancing the business environment through legislative reforms.* Privatization also opened the opportunity for ADWEA to enter into joint ventures with world leading companies thereby *enhancing the business climate to integrate Abu Dhabi in the global economy by attracting foreign investment and international partners.* All these are concrete indicators that privatization is contributing to economic diversification. Overall these reforms in the utilities sectors have not only shifted the government's function from "rowing" to "steering" but are edified milestones that see the leader's vision come to life.

The case of the privatization of the utilities sector in Abu Dhabi is one that is driven by political will. In the case of Abu Dhabi, it all started with the leader and everything else such as laws, regulatory frameworks, structural support and financial mechanisms followed. The case of Abu Dhabi showcases how political will can move mountains and this study can contribute to theory by illustrating that this is so. While privatization is mostly viewed in economic terms, this study can also contribute to political theory considering the centrality of political will in the implementation of privatization. The study can contribute the concept of a vision-driven privatization in rentier states under favorable conditions to existing theoretical perspectives.

5. Limitations of the Study

The scope of the study was limited by the accessibility of the government executives who were initially involved in the privatization efforts of the government. It would have been ideal to have included them as participants in the study but knowing how high officials in government concerned themselves with solely executive matters made it difficult or impossible for their inclusion in the study. Since it was the ADWEA that identified the appropriate participants, the scope of the study was also limited by the participants' experiences. As noted, the participants from the IWPPs only became part of the privatization process at that time their companies started operating as partners of ADWEA. This means that their perceptions were limited only starting from the time that their companies started as private partners.

There was also the limitation imposed by the method as generally methods in qualitative research are not as structured as those of quantitative research. The time and accessibility constraints limited the nature of the data collected hence the researcher had to contend with using thematic synthesis. There were also limitations experienced due to the language barrier and the attitudes of the respondents. Having the interview taped had its advantage because the answers could always be reviewed. However, the researcher noticed that the answers given by the respondents were short. To bridge this limitation, the researcher had to make a lot of ad libs and then try again to probe deeper on their answers.

One of the strongest limitations is the availability of recent literature. Most of the substantive literature that deals with the dynamics of privatization, in general, are quite old, more so with the literature dealing with the privatization of the utilities sectors and much more with the literature on the privatization of the utilities sector in the local and regional context. This limited the researcher to utilize whatever information was provided to him by ADWEA some of which were limited by confidentiality hence could not be disclosed to the public. These were helpful though in having a view of the big picture.

6. Directions for Future Research

The study revealed some findings and insights that can potentially constitute a future research agenda. A qualitative research can be conducted for the purpose of translating the benefits gained from privatization in quantitative terms. An econometric study on the gains of privatization in the emirate would be a noteworthy study. Another study can be the impact of privatization on the community to verify and countercheck impacts reported from the side of the authorities. While this study focused on internal stakeholders, a study of the benefits gained by the community would focus on external stakeholders.

A cross-country comparison in the GCC regarding the outcome of the implementation of the Single Buyer

Model can also provide knowledge on the strengths and weaknesses of the different versions of the single buyer model as implemented by different countries in the GCC.

From the issues identified in the study, other potential areas for future research on privatization in the utilities sector can include exploring the effectiveness of knowledge transfer, the problems encountered by IWPPs in the host country, the impact of Emiratization on firm performance, the exercise of corporate social responsibility by privatized companies, among others.

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