Journal of Applied Economics and Business

OPEN ACCESS ARTICLE

PRO-POOR CORPORATE GOVERNANCE APPLICATION IN HYGIENE WATER PROVISION AT SOUTHEAST SULAWESI PROVINCE

Syamsir Nur[1*], M. Pudjihardjo[2], Moh. Khusaini[3], Wildan Syafitri[4]

[1]Economics Department, Halu Oleo University, Indonesia

[2,3,4]Economics Department, Brawijaya University, Indonesia

[*]syamsirnur81@gmail.com

Abstract

Authority of hygiene water management and provision in Indonesia has been conducted by local government which managed generally through Local Company of Drinking Water (PDAM). Fulfilling the public need which involves the business entity have caused the practice of corporate governance become important to analyze for ensuring that the hygiene water service by PDAM can be accessed and reached by people especially for low income household group. This research analyzed an effect of corporate governance application within hygiene water management and provision toward pro-poor public service performance by using Partial Least Square (PLS) analysis. Analysis unit is the household of PDAM customer both located in urban or rural areas. This research found that corporate governance application on hygiene water management and provision has influenced public service performance, but it didn't give the pro-poor services. Therefore, application of corporate governance principle, especially accountability and transparency principles are important to defend consistently by PDAM (operator) to keep public service mission; while application of independence, responsibility and fairness principles are still imortant to increase for pro-poor public service. Controlling and assessment functions for application of those principles are absolutely important to conducted by local government (regulator) to prevent PDAM management hazard.

Key words:

Pro-Poor Corporate Governance; Public Service; Hygiene Water

INTRODUCTION

Role of local government in public service provision can be done by two categories such as direct provision and indirect or delegated service management (Benyamin, 2009). The first category is basically positioning the local government as direct provision of public service which means under controlling and financed by

government, while the second category is basically positioning the local government as regulator, but the public service can be done by private company, community or volunteer institution.

Management and provision of hygiene water service by local government through Local Company of Drinking Water (PDAM) show that involving private side in implementing public service in hygiene water sector is as *service delivery*. Villaverde A. Ruiz *et al.* (2013) stated that combination of service pattern is an option to combine profit from public good and private management, although other opinion stated that combination of company management can raise an internal conflict significantly between public interest and personal interest of manager (Cruz and Marques, 2012).

Hygiene water service managed by company which tends to create "conflict of interest" need the management approach which should be controlled and supervised based on applied regulation and determination. This is aimed to make the company management can be done openly, accountable and to have monitoring process. The researcher assumes that it is important for company management in perspective of corporate governance to solve conflict of interest between regulator side and principle (owner) which has an important for public service and operator side or agent as business entity. Application of corporate governance is important to encourage the creating an efficient, transparent, and consistent market with applied regulation (Prayitno, 2014). Application of corporate governance on public governance within hygiene water service is likely to have synergy which makes the government and private sectors oriented to public interest and collaborated more effective in establishing the people welfare.

Various facts related with hygiene water provision which conducted by PDAM in many locals in Indonesia showed some problems, especially on service aspect and reliability of provision system. PDAM as operator is faced with piping networking which still limited, operational cost, and the high leakage water, so these had impacted to quality, quantity, and continuity (3K) of water distributed. On other sides, the local government as regulator has been faced with limited cost for infrastructure of PDAM and the weak of monitoring and evaluation. Some problems in management and hygiene water provision are suspected to have implication to meet hygiene water needs for poor people tend to be skipped.

This study is aimed to analyze application of corporate governance within management and provision of hygiene water in Southeast Sulawesi Province and their effect for pro-poor public service performance.

CHARACTERISTICS OF HYGIENE WATER

Hygiene water is one of the most essential need, which should be available within enough quantity and quality that meets requirements and ensured of their

continuity. In addition to consume, the hygiene water can also become one of facilities to increase life welfare through an effort to increase healthy level (Hakim, 2010). Hygiene water provision with limited and bad quality will cause economic and non-economic impacts for people.

There are some views related with hygiene water characteristic which implicated to the raising debate on infrastructure provision of hygiene water. Hadipuro (2009), stated that water is *common pool resources*, the limited resources but can be substituted, because it has many characteristics related with right to belong, such as water can become an *open access* which characterized with not the right to belong, water is as community good, personal property right, and state property. Differences of ownership regime make the different outcomes, because an inherent institution on one regime of the ownership right would determine access, usage, exclusion, management, monitoring, giving sanction, and arbitration if there is problems.

Other opinion stated that water is public goods, it is the non-rival good; if the water were consumed by someone, then it will not reduce other opportunity to consume it also. Water is also inherently to have non-excludable properties, which means almost impossible to eliminate the people right to consume water. As the basic need, the demand of water is impossible to limit because the purchasing power only. In this context, understanding about water as public goods has emphasized on public ownership. (Munif, 2012).

But, there is also argument that water can be treated as public good purely. Water needs the cost for its procurement, so it should be also treated as an economic goods which must be managed accordance with an economic law, as stated by Budds and McGranahan (2003). Managing water as economic good will be allocated for user which competes each other, so it gives the maximum value for user. This statement will place the poor people become loses in competing, because they can't afford to reach the maximum value wanted (Gleick, 2002), and even this statement will enlarge the private involvement in provision of hygiene water service (Shiva, 2002) which certainly will threaten the right for water.

According to constitution of state of Indonesia, hygiene water is public good which recognized by the state as human right (Hanafi, 2011), so the government become the most responsible party to meet the right for water with justice and prevalent for all people (Setianto, 2009). Water management is not only considered on economic aspect, but also social aspect. Villaverde A. Ruiz *et al* (2013) stated that policy makers should consider an important of social aspect and people participation win water management services. Treating the water is only economic good to cause the lost of social function and can make the poor people to be neglected for need of water (non pro poor). Mirzakhanyan et al., (2005) on research result reporting of UNICEF (2012)

stated clearly that pro-poor policy is signed by policy which develops an *expanding opportunities* from poor people through basic infrastructure provision or supporting infrastructure.

CORPORATE GOVERNANCE

*G*overnance can be meant as the way to manage public business. *World Bank* emphasizes that *governance* is the way of government to manage social resources and economic for community development interest, while *United Nation Development Program (UNDP)* is more emphasizing on political, economic, and administrative aspects within state management. *Economic governance* refers to decision making process of economic field which implicated on prevalence problem, poverty reduction, and increasing of life quality. (Mardiasmo, 2002). If referring to concepts of World Bank and UNDP, then development orientation of public sector is to create good governance, i.e. the responsible development practices, lining with principles of democracy and supporting with the business activities growth.

Some thoughts on corporate governance have developed with starting point on agency theory, where there is separation practice of ownership and company management functions because limitation of principal capability in managing the company, and other side the professionals offers their capability to manage agents (Kaihatsu, 2006). *Corporate governance* is meant to minimize fraudulent potential as the consequences of the agency problem.

According to Syakroza (2000), there are two causes of the raising idea of *corporate governance*. First is very fast environment changing which have an impact for changing of global market competition map; and Second, more parties and complexes which have interest with company and global market competition are increasing continuously because triggered by sophisticated technology and economic regulations. Based on the view, application of good corporate governance is important supported by three interrelated pillars, such as state/government and the apparatus as user of product and services.

Corporate governance is paradigm of corporate governance which supports the efficient, transparent, and consistent market with the regulation applied. Their practices are an effective systems and structure which can create a valued added for overall stakeholder (Monks, 2003 *within* Kaihatu, 2006), this is also meant to accomodate the demand of many sides about corporate responsibility (Prayitno, 2014).

According to Ariyoto (2000), there are three *corporate governance models*, such as *Principal Agent Model*, called as *agency theory*, the corporation is managed to give win-win solution for shareholders as owner in one side, and manager as an agent in other sides; *The Myopic Market Model*, which focuses on interest of shareholders and manager; and *Stakeholder Model*, which emphasizes on interest of parties related with

corporation largely including ethical and moral problems, law of policy government, social environment, socio-economic and politic.

Good corporate governance needs application of the main principles of *corporate governance*. Those principles are *transparency*, *accountability*, *responsibility*, independence, and *fairness*. According to Ningsaptiti (2010), application of *corporate governance principles* within hygiene water provision management has given the usefulness, such as increasing corporate performance through the creation of better policy taking process, increasing service to people, making easy to get cheaper cost, so these usefulness can increase *corporate value* and *Shareholder's* value and also dividend.

RESEARCH METHOD

This research is conducted in Southeast Sulawesi Province which focused on PDAM service user, specially the customer with household category which consumes water of PDAM on block 1 (0-10 M^3 consumption) and block 2 (11-20 M^3 consumption) by 100 people as the samples.

Partial Least Square (PLS) analysis is used to analyze relationship of corporate governance application toward pro-poor public service performance. Indicator of corporate governance variable consists of: application of transparency, accountability, responsibility, independence, and fairness principles; focus on board, law and regulation; and also organization, service quality, service coverage and satisfaction; and also pro-poor variable consist of affordability and access.

RESULT

Discussion consisted of two sections, such as: (1) discussion for research *outer model*; and (2) discussion for research *inner model* which was formulated.

RESULT OF RESEARCH OUTER MODEL TEST

Result of research outer model is described by comparing coefficient value of *outer loading* estimation and *mean* of respondent's assessment from each variable of this research.

Corporate Governance Variable

Relationship between *loading factor* and mean of indicators on *corporate governance* variables are presented on Table 1. It showed that indicator of organization goals ($X_{1.8}$) had higher outer loading value than other indicators, which showed that organization goals are the most able to describe corporate governance variable. Indicator of organization goals are stronger to become corporate governance measurement, because practice of public corporate management who has potential of conflict interest between principal and agent must be started by placing

foundation of clear and measurable organization goals. Consistency for implementation of governance is accordance with organization goals and the applied regulation will achieve the good corporate governance.

TABLE 1. RELATIONSHIP OF LOADING FACTOR AND MEAN OF INDICATORS ON CORPORATE GOVERNANCE VARIABLE

Indicators		*Outer Loading*	Mean
$X_{1.1}$	Application of Transparency Principles	0,868	3,59
$X_{1.2}$	Application of Accountability Principles	0,830	3,71*
$X_{1.3}$	Application of Responsibility Principles	0,822	3,23
$X_{1.4}$	Application of Independence Principle	0,814	3,29
$X_{1.5}$	Application of Fairness Principle	0,835	3,23
$X_{1.6}$	Focus on Board	0,835	3,37
$X_{1.7}$	Law and regulation	0,878	3,56
$X_{1.8}$	Organization Goals	0,904 *	3,44

Notes: * = highest value

Outer loading value is different with mean value of respondent perception for this variable. In general, household of PDAM service user assessed that application of accountability principal ($X_{1.2}$) is as the most proper indicator to describe corporate governance variable. This give a meaning that there is awareness of responsibility owned by PDAM in managing and providing the hygiene water to meet public need and there is awareness of corporate organ as part of local government to become achievement key to be good corporate governance.

Public Service Performance Variable

Relationship between *loading factor* and mean of indicator on public service performance variable is presented on Table 2.

TABLE 2. RELATIONSHIP OF *LOADING FACTOR* AND MEAN OF INDICATOR ON PUBLIC SERVICE PERFORMANCE VARIABLE

Indicators		*Outer Loading*	Mean
$Y_{1.1}$	*Utilization*	0,912	2,98
$Y_{1.2}$	Service Quality	0,958*	3,54*
$Y_{1.3}$	Service Coverage	0,875	3,23
$Y_{1.4}$	Service Satisfaction	0,908	3,15

Notes: * = highest value

Table 2 showed that service quality indicator has higher outer loading value than utilization, service coverage and satisfaction. The value showed that service quality is as the most proper indicator to describe public service performance variable. This

gives the meaning that the quality service for people, especially customer will encourage an increasing PDAM service performance as the public entity. If the service were not qualified, then the public service performance conducted by PDAM tends to be not good.

Outer loading value for service quality indicator is consistent with mean of respondent's perception value. Mean of value obtained for service quality indicator is 3,54. This gives the meaning that customer of PDAM have given an assessment that service quality given by PDAM specially related with water distributed is the main factor which determines the public service performance by PDAM. The service quality is more emphasized on aspects of water quality, quantity, and continuity. Therefore, outer loading value and mean of value are the signal that for increasing public service performance is important to increase by PDAM.

Pro Poor Variable

Relationship between *loading factor* and mean of indicator on pro-poor variable are presented on Table 3.

TABLE 3. RELATIONSHIP OF LOADING FACTOR AND MEAN OF INDICATOR ON PRO POOR VARIABLE

Indicators		*Outer Loading*	Mean
$Y_{2.1}$	Affordability	0,950*	3,30*
$Y_{2.2}$	Access	0,938	2,89

Notes: * = highest value

Table 3 showed that outer loading on affordability indicator have higher outer loading than access indicator on pro-poor variable. This means that affordability indicator is more proper to describe pro-poor variable. This gives the meaning that an effort for pro-poor public service through fulfilling the hygiene water needs which provided by PDAM is strongly influenced by cost earning for the hygiene water can be reached by people.

Outer loading value on affordability indicator is consistent with mean of respondent's perception value. Mean of value obtained for the indicator is 3,30. The indicator value gives the meaning that water consumption level from PDAM piping for household category customer has been influenced by proportion of their income in paying the cost of obtaining the hygiene water. Therefore, affordability aspect in piping water provision is one of important factor in providing pro-poor public service.

RESULT OF RESEARCH INNER MODEL TEST

Result of structural model test (inner model) can be seen on Table 4.

TABLE 4. RESULT OF STRUCTURAL MODEL TEST

No.	Relationship between Variables		Path Coefficient	*p-value*
1.	*Corporate Governance* (X_1)	Public Service Performance (Y_1)	0663	0,000
2.	*Corporate Governance* (X_1)	*Pro poor* (Y_2)	0,284	0,091

Effect of Corporate Governance Application for Public Service Performance

Table 4 showed that coefficient correlation value as 0,663 and t-statistic value as 11,085 > 1,960 or p-value as 0,00 < 0,05 have indicated that analysis result between corporate governance application with public service performance to be evidenced that there is positive and significant correlation. The research result gives a meaning that application of corporate governance practice has been improved. Then it would increase public service performance by PDAM for the customers. In contrast, the application of corporate governance will cause the public service performance conducted by PDAM to be decreased also. It means that application of corporate governance principals with focus on board, compliance with law and regulation and also clearness of organization goals will be implicated on effectiveness, efficiency, and productivity of PDAM organ in giving public service.

Any separation of ownership and corporate management functions showed that hygiene water provision by the local government which managed by PDAM is the corporate governance practice which tends to implicate for the raising conflict interest between local government (principal) and PDAM as agent, the interests are fulfillment of public needs (public interest) and business interest (profit interest). These empirical facts has reinforced an agency theory by Jensen and Mekling (1976) which stated that principal agent practice will raise some implications for corporate performance and sustainability. Good application of corporate governance principles within management and hygiene water provision by PDAM (agent) can minimize the potential of fraudulent as result of agency problem, but if the principle is ignored by agent, then the public service performance as the local government interest (principal) will not be improved. This is lining with finding of Prayitno (2014) which stated that consistent application for corporate governance principle in hygiene water management by PDAM has become the main device to minimize the agency problems.

Application of accountability principles or seriousness of PDAM in achieving the corporate goals (public mission and business mission) within hygiene water management and provision are the most dominant factor to give impact for public service performance of PDAM, especially related with water utilization level, service quality, service coverage and customer household satisfaction in obtaining the hygiene water. Therefore, non-accountable PDAM will be faced on decrease public service performance, so this builds "unprofessional" public image, there is distrust

and even according to Sulistianing, A. Retno (2006) encourage the people intention to provide hygiene water individually.

Other empirical facts showed also that application of responsibility principles, fairness principle, and independence principle are still becoming the problems and exacerbate the practice of corporate governance of PDAM in management and provision of hygiene water for public. Some aspects which triggered problems on application of responsibility principles are channel/media submission of complaints which can't be provided easily and cheaply for customers, handling for complaint which tends to be not on time, customer's complaint for water consumed can't be handled well. This showed that the company in management and provision of hygiene water is not complying the regulation and law applied, for example consumer protection regulation and health regulation, so it causes the low utilization of hygiene water, the decreasing service quality and customer satisfaction. Application problems of fairness principle which become trigger of the decreasing for corporate governance application are caused by injustice treatments by corporate in giving service and corporate handling, there is still insider trading, self-dealing in services, discriminative service for customers, and amount of money for connectedness and improper payment rate with water quality obtained, so it makes the detrimental for customers and also the local government. Bad application of independence principles are also caused by dependent handling of customer's complaints, ignoring standard of service determined specially in handling customer's complaints and delivering the information related with inaccurate and late service operational.

Still weak in application of the principles above have caused the PDAM to be not able to protect balances of interest (business mission and public mission), the application of corporate governance is really needed in public sector to guarantee no "imbalance of power" for some parties related with the corporate, so it will make the following positive impact for corporate efficiency, the creating a better process of decision taking, increasing service for stakeholder (Ningsaptiti, 2010), for economy and the creating of community welfare (Syakhroza, 2005; Matei & Drumasu, 2014).

Effect of *Corporate Governance* Application for *Pro Poor*

Table 4 showed that correlation coefficient value as 0,284 indicating that good corporate governance application tends to be able increasing access and affordability (pro-poor service). But, empirical facts showed that *corporate governance* application didn't effect for pro-poor with 1,691 < 1,960 t-statistic value or 0,091 > 0,05 p-value. *Corporate governance* application within hygiene water provision by PDAM doesn't give useful directly for customer household in form of increasing access and affordability of hygiene water provision. In contrast, the bad *corporate governance* is

not also decreasing directly an access and affordability within hygiene water service provision conducted by PDAM.

Although the authority of hygiene water management and provision have been long time given to PDAM, but this study showed that corporate governance practice within hygiene water service provision can't increase an access and affordability of service to customer household. This showed that there is no guarantee for PDAM which has applied the corporate governance principle can create the pro-poor public service for household customer.

Application of responsibility principle, fairness and independence which are still creating problem to cause PDAM to be more emphasizing their interest as corporate, the corporate is not professional as public service provider entity, so this useful proportion obtained by user with household category is indirectly smaller than obtained by non-household user. This finding has stated the research result of Godrey et al. (1997) which expressed that in the agency theory of public sector, there is not guarantee for agent to act in fulfilling the principal interest or public welfare, but it tends to have opportunist behavior. Different with UNDP concept within Mardismo (2012), which describes that governance practice which conducted by government in managing social and economic resources are at least showed for community development interest, so it would be implicated to reduce poverty and to increase life quality (economic growth).

Empirical facts showed that affordability dimension is as the most important indicator assessed by customer as the dimension which can produce pro-poor public service. That assessment is consistent with outer loading value, so this assessment asserted that cost aspect of obtaining hygiene water, both cost for installation, water rate or price of PDAM water are very determining pro-poor public service. Any dimension access which becomes one of pro-poor service indicator, which also known as problems which is signed the time used to obtain PDAM water to be longer (distribution by turn/zone) and also media to deliver customer's complains are still limited. Thus, hygiene water service can be said pro-poor, if the time used by household in enjoying the hygiene water provided by PDAM to be smaller than the time to obtain hygiene water non PDAM.

CONCLUSION

Corporate governance application within hygiene water management and provision conducted by PDAM had positively and significant effect for public service performance conducted by PDAM, but it has insignificant effect in increasing the service access and affordability) of hygiene water for low income people (non pro-poor). Application of independence, responsibility, and fairness principles should be increased, while application of accountability and transparency principles and reaching the organization goals of PDAM should be defended consistently to keep interest diversity (mission of public service is not ignored). The local government

(owner) is important also to increase controlling function to prevent hazard of PDAM manager. The tight controlling will not only produce pro-poor public service, but also asserted that the government is the most responsible party in fulfilling hygiene water provision for their citizens.

REFERENCES

Ariyoto, K. (2000). Good Corporate Governance dan Konsep Penegakannya di BUMN dan Lingkungannya. Jakarta, USAHAWAN No. XXIX October, 3-17.

Bhattacharyay, B. Nath. (2010). Estimating Demand for Infrastructure in Energy, Transport, Telecommunications, Water and Sanitation in Asia and the Pacific: 2010-2020. Tokyo, ADBI Working Paper Asian Development Bank Institute (248), 1-44.

Bosch, C., Hommann, et al. (2001). Water, Sanitation and Poverty-Poverty Sourcebook for Poverty Reduction Strategies (2), 371-404. Washington, D.C.: World Bank

Budds, J. & McGranahan, G. (2003). Are The Debates on Water Privatization Missing The Point? Experiences from Africa, Asia and Latin America. Journal Environment & Urbanization, 15(2), 87-113.

Creswell, John. W. (2012). Research Design; Pendekatan Kualitatif, Kuantitatif dan Mixed. Yogyakarta, Pustaka Pelajar.

Cruz, N. & Marques, R., (2012). Mixed Companies and Local Governance: No Man Can Serve Two Masters. Public Administration (90), 737–758.

Duclos, Jean-Yves. (2009). What is Pro-Poor? Canada. Social Choice and Welfare Journal 32(1), 37-58.

El Ouardighi, & Jalal dan Rabija Somun-Kapetanovic. (2009). Is Growth Pro-Poor in the Balkan Region?. Eastern Europe Economics, 48(3), 9-21.

Garmendia B. C., Estache, A. & Shafik, N. (2004). Infrastructure Services in Developing Countries: Access, Quality, Costs, and Policy Reform. Paper World Bank Policy Research No. 3468, 1-33.

Godfrey, Jayne M. & Kerrie L. Jones. (1997). Political Cost Influences on Income Smoothing Via Extraordinary Item Classification. Accounting and Finance, 229-254.

Gray, N.F. (2000). Drinking Water Quality. Cambridge University Press.

Hadipuro, Wijanto. (2009). Valuasi Air. Jakarta, Amarta Institute-TIFA Foundation, 1-22.

Hair, Joseph F, et al. (1996). Multivariate Data Analysis. Fifth Edition. United States of America; Printice- Hall International.

Hakim, D. Lukmanul. (2010). Aksesibilitas Air Bersih Bagi Masyarakat di Permukiman Linduk Kecamatan Pontang Kabupaten Serang, Tesis, Program Pascasarjana Universitas Diponegoro.

Hanafi, Imam. (2011). Kebijakan Air Bersih. Malang, UB Press.

Hendri. (2010). Pelayanan Publik Menurut UU No. 25 Tahun 2009. http://lp3si.wordpress.com/ . April 2014

Howard, G. & Jamie, B. (2000). Domestic Water Quantity, Service Level and Health. World Health Organization.

Hyman, David. (2005). Public Finance; Eighth Edition. USA. Thomson SouthWestern.

Kaihatu, Thomas S. (2006). Good Corporate Governance dan Penerapannya di Indonesia. Jakarta, Jurnal Manajemen dan Kewirausahaan, 8(1), 1-9.

Mahsun, Moh. (2011). Pengukuran Kinerja Sektor Publik. Yogyakarta. BPFE UGM.

Malhotra, Naresh. (2010). Marketing Research, An Applied Orientation. The Prentice-Hall. Inc. New Jersey

Matei, Ani & Ciprian Drumasu. (2014). Romanian Public Sector. A Corporate Approach. Procedia - Social and Behavioral Sciences 109, 1120-1124.

Mungkasa, O. (2006). Dampak Investasi Air Minum Terhadap Pertumbuhan Ekonomi dan Distribusi Pendapatan di DKI Jakarta, 1-168.

Neuman, W. Lawrence. (2006). Social Research Methods; Qualitative and Quantitative Approaches. Sixth Edition. USA. Pearson International Edition.

Ningsaptiti, Restie. (2010). Analisis Pengaruh Ukuran Perusahaan dan Mekanisme Corporate Governance Terhadap Manajemen Laba.

Parkin, M. & Bade, R. (1995). Modern Macroeconomics, Fourth Edition, Prentice Hall Canada Inc., Ontario.

Parsons, W. (2011). Public Policy; Pengantar Teori dan Praktik Analisis Kebijakan. Jakarta. Prenada Media.

Puspitorini, D. & dan Masduqi, A. (2012). Strategi Penyediaan Air Bersih di Desa Rawan Air Bersih di Kabupaten Ponorogo Propinsi Jawa Timur, Tesis, Program Studi Teknik Prasarana Lingkungan Permukiman Program Pascasarjana Institut Teknologi Surabaya.

Prayitno, E. (2014). Pengaruh Informasi Asimetris dan Biaya Transaksi Terhadap Corporate Governance dan Kinerja Organisasi Publik (Studi Kasus PDAM Kabupaten Malang), Disertasi, Program Doktor Ilmu Ekonomi Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya

Rochmah, S. (2013). Responsivitas Pelayanan; Studi pada Kebijakan Pelayanan Air Bersih. Malang. UB Press.

Santoso, H. (2010). Air Bersih dan Sanitasi Sebagai Kebijakan Sosial. Jakarta, Modul Kebijakan Publik, Komunitas Indonesia untuk Demokrasi, 1-20.

Sekaran, Uma & Roger Bougie. (2010). Research Methods for Business: A Skill Building Approach. John Wiley & Sons Ltd, United Kingdom

Sentosa, Dani. (2013). Perbedaan Barang Publik dan Eksternalitas.

Sulistianing, A. Retno. (2006). Kajian Aspek-Aspek Yang Mempengaruhi Penyediaan Air Bersih Secara Individual di Kawasan Kaplingan Kota Blora, Tesis, Program Magister Teknik Pembangunan Wilayah dan Kota Universitas Diponegoro.

Suyanto, B. (2013). Anatomi Kemiskinan dan Strategi Penanganannya. Malang. In-TRANS Publishing.

Thomas, R. L. (1997). Modern Econometrics, Addison Wesley Longman, Edinburgh.

UNICEF. (2012). Kebijakan Pemetaan Pro Rakyat Miskin di Provinsi Aceh, 1-47.

Utama, C. (2010). Manajemen Kenaikan Tarif PAM Untuk Peningkatan Akses Air Bersih Bagi Seluruh Masyarakat. Jurnal Administrasi Bisnis-Unpar, 6(2), 146-159.

Villaverde, A. Ruiz., et al. (2013). The ''Social Choice" of Privatising Urban Water Services: A Case Study of Madrid in Spain, Working Papers in Applied Economics. WPAE-2013 (22), 1-22.