# The Financial Management PLN - Today and the Future

Aminullah Assagaf.

(Post Graduate Program University Dr. Soetomo).

**ABSTRACT:** The purpose of writing this article is to describe the problems of financial management as well as financial statements since the last few years, showed a spectacular increase subsidies and increase the amount of debt that exceeds the ability of PLN's internal liquidity. Problems can be overcome if the management company's conduct break through step based financial management principles. In this study used several analytical approaches as finance Financial Management: Theory and Practice (Eugene F. Brigham and Michael C. Ehrhardt, 2001) and economic analysis as Managerial Economic: Analysis and Strategy (Evan J. Douglas, 1992). require aggressive efforts to realize the adjustment of electricity tariff, starting from PLN ie internal financial management discretion to present financial statements that is more realistic in a loss position significantly.

## **KEYWORDS**: financial management, PLN, today, and future

# I. BACKGROUND

In the case study PLN means that the greater the subsidy period to come because it is not possible operational PLN frozen. In order to help ease the burden of the government, then this is where the role of financial management PLN perform its functions and ensure the application of financial management principles consistently. Excess demand as a trigger policies to meet the needs of consumers through a program to achieve the electrification ratio target as Electricity Statistics 2012 through www.esdm.go.id. In comparison of 2008 and 2009, the electrification ratio reached 65.1% and only 65.8%, and since 2010 the ratio increased aggressive electrification and the end of 2012 has reached 75.8%. PLN faced increased the amount of debt that is spectacular and difficult liquidity at maturity. The use of foreign debt is also at risk for the PLN in the event of weakening rupiah in 1997-1998 as an example of PLN's foreign debt increased by about four times as a result of changes in the exchange rate of U.S. \$ Rp 2,500 to Rp 10,000. Examples of other woods, occurred in 2013 foreign exchange losses of Rp 48 billion, according PLN through www.pln.co.id financial statements dated February 25, 2014. Cash flow is even more alarming because (a) the internal capability of PLN (electricity sales) is only able to fund its operations approximately 69.4% in 2013 and the rest is still dependent on electricity subsidies, such subsidies in 2013 to Rp 101.2 billion. (b) debt maturing difficult to meet cash flow from operations, (c) addition of new loans in large numbers continue to be made to meet the investment needs achieve electrification ratio target. Based on figures PLN's financial statements in 2013 the amount of debt and internal cash flow ability of PLN has become increasingly serious. Debt Rp 32.7 billion subsidiary loan, bank debt and medium-term securities Rp 74.8 billion to Rp 83.8 billion bond debt, and the debt of Rp 26.5 billion. Total debt is still increasing due to the construction of the installation is still underway, (d) current assets that are illiquid in 2013 reached Rp 47.1 billion, but the numbers are still relatively small compared uatng short-term maturities. Current assets in 2013 amounted to Rp 63 billion, consisting of cash and cash equivalents of Rp 25.5 billion to Rp 15.7 billion in trade receivables and bills subsidy of Rp 21.8 billion. This is where the role of financial management PLN to perform its functions in such a way that companies avoid the risk of financial crisis. PLN's financial management strategy should be based on a comprehensive wisdom involving internal and external potential for the company to avoid financial hardship.

# II. LITERATURE REVIEW AND RESEARCH HYPOTHESIS

Arthur J. Keown in his book Financial Management (2008, Issue 9, Chapter 1), suggests 10 basic principles of financial management, namely (1) the balance of risk and return, do not increase the risk of additional compensation unless there is a return on investment. (2) The time value of money, the money received today is more valuable than money received in the future. In understanding the fee structure commonly used in business practices or concepts according to the literature,

the following was stated references through www.tammzt.wordpress.com dated December 15, 2011, entitled "The concept of the economic and environmental costs," which include (a) the concept of cost, (b) the cost function based company, (c) a fee based on the period, (d) cost based object tracking costs, (e) costs based on changes in the volume of activity, (f) based on the cost control manager, (g) the cost based decision making,

(h) based on the cost impact of the decision, (i) the opportunity cost is based on the utilization of basic cost. price expressed as a cost, and the term cost of goods sold expressed as expense. trough *www.herryakman.blogspot.com/2011/19/konsep-biaya.htm / date 13 September 2011*, entitled "Management Accounting: Concepts Cost". According to Hansen and Mowen (2004:40), the cost is defined as cash or cash equivalent value sacrificed to obtain goods or services that are expected to benefit now or in the future for the organization. Meanwhile, according Supriyono (2000:185), the cost is economical sacrifices made to obtain goods or services. Understanding the cost according Harnanto and Zulkifli (2003:14) is something that connotes a deduction that must be sacrificed to obtain the ultimate goal is to bring profit. So according to some understanding of the above, it can be concluded that the cost of a cash or cash equivalent value issued by the company to acquire goods or services that are expected to provide a benefit that is an increase in earnings in the future.

## III. FEASIBILITY TARIFF STRUCTURE

In finance, electricity tariff structure is not very feasible because it is not able to cover the cost of providing, operating costs and even variable costs. Realization of the year 2012, as published *www.pln.co.id* average tariff of Rp 728 per kWh, while the cost structure indicates (a) the cost of the provision of Rp 1,343 per kWh, (b) operating costs Rp 1,167 per kWh, (c) variable costs (fuel, lubricating oil, power purchase and lease engines) average of Rp 842 per kWh or negative contribution margin Rp Rp 114 per kWh, and (d) variable costs (including the cost of maintenance 50%) an average of USD 892 per kWh or negative contribution margin per kWh of Rp 164. This is what causes the trade off between service subsidy

## service performance

Various parties provide comments related to the performance of services is not as expected PLN community, including (a) the comments of the chairman of the House Marzuki Alie, through www.merdeka.com dated October 20, 2012, titled "Performance PLN bad". According to him, the manner PLN everywhere and blackouts are not clear. The government has given huge subsidies for electricity, but still outage. (b) Vice Chairman Banggar Olly Dondokambey, *www.ollydondokembey.com* date through August 17, 2011, entitled "Improved performance PLN awaited", suggests that the improved performance of PLN a waited, especially after the government's plan to raise electricity rates while lowering the April 2012 budget electricity subsidy of Rp 20 billion, compared to 2011. Targeted electricity subsidies in 2012, it appeared difficult to achieve because the electricity subsidy in 2012 reached Rp 103.3 billion higher than in 2011 amounted to Rp 93.1 billion Total electricity subsidies is getting out of control

Various parties have given attention to the amount of electricity subsidies are increasingly out of control. The cost structure and the tariff structure is quite obvious as financial statement information through *www.pln.co.id* PLN, where the financial management should give serious attention and care for the interests of corporate finance in addition to achieving the electrification ratio. President Susilo Bambang Yudhoyono, the Coordinating Meeting of Governors of Sumatra in Palembang, July 29, 2013 through *www.rinanews.com* dated July 30, 2013, titled "SBY told subsidy increasingly damaging the economy" asks co-efficient movement of fuel and electricity. He expressed a very heavy burden for the state budget subsidies. Anwar Nasution, as reported by *www.regional.kompas.com* dated 16 April 2013, entitled "The economic impact of energy subsidies" suggests that the greater the portion of the budget for the purposes of energy subsidies, the less funds available for education and public health.

## PLN contribution to the current account deficit

The government's announcement also informed through *www.bisnis.liputan.com dated August 29*, 2013, titled "4 complete package of government economic policies". Current account deficit occurs because the flow of money out in the form of foreign exchange is greater than the cash inflows, foreign exchange or demand higher than the supply of foreign exchange, resulting in foreign exchange rates or rising dollar and the rupiah weakened. PLN contribution to the current account deficit occurs either through the use of foreign exchange to the procurement of goods and services from abroad and domestic procurement such as natural gas and other purchases.

## Balance of payments and current account

Here's a related view of the balance of payments, namely through *www.id.wikipedia.org* / *wiki* / *Payment Neraca\_ 4 September 2013*, entitled "Balance of payments", which is an overview that summarizes transactions between residents of a country with the population of other countries over the period particular (one year). Balance of payments current account is divided into (which is composed of the trade balance, balance of services and transfer payments), and the balance sheet and financial capital flows, and financial items.

## Government foreign debt

The impact of the use of foreign debt by, *www.dettwaningrum.blogspot.com*, 8 November 2012, entitled "Goodness and badness foreign debt", suggests that foreign borrowing would cause problems if the funds are not invested productively for activities that generate a high rate of return on foreign exchange to cover interest payments. The world debt crisis that occurred in the decade of the 80s became evident dangers financing through foreign debt in which many countries were forced to postpone the obligation to pay the debt (Weiss, 1995). The tendency of foreign debt and state governments is increasing, as, *www.citizen.forumkeadilan.com*, July 18, 2013, entitled "Here's Ministry / State and Non-State champion finish off the foreign debt", said that in May 2013, the Ministry of Finance noted that the debt state of RI has reached Rp.2.036 billion.

### Indonesia's foreign debt trap

In a broader context, the following was stated by *www.sofyandi-simbolong.blogspot view. com, July 7, 2013*, titled "Indonesia's foreign debt trap", suggests that the Indonesian government's commitment to achieve economic independence and reduce reliance on foreign debt began to be questioned and it never seems to happen.

## Funding PLN rely on foreign debt

Number of PLN debt in which there is a large amount of foreign debt associated with foreign exchange as an explanation PLN audited financial statements through *www.pln.co.id*. Realization 2012 reached the amount of PLN Rp 390.1 billion debt consists of non-current debt of Rp 315.5 billion and Rp 74.6 billion current debt. Total debt is still increasing in the future as the project development and delivery of the installation of production facilities is still ongoing. Comments related to the foreign debt, through *www.amiesuzako.blogspot.com*, January 30, 2012, entitled "Debt RI 2000 -2012", informed that President Susilo Bambang Yudhoyono reminded the ministers continue to decisively reduce foreign debt. Associated with debt PLN, through *www.tempo.co, dated October 19, 2010*, entitled "Shopping PLN rely on foreign debt", informed that the capital expenditure of PT PLN (Persero) for the next year is projected to reach Rp 60 billion. Complementing this information, the following directors PLN submitted comments via *www. indonesiafinancetoday.com dated July 26, 2013*, entitled: "Reach PLN 200 Million Euro Loan Commitment", informed that PT PLN (Persero) obtain a loan commitment from the Export Credit Agency (ECA) of Finland for two power projects, namely power plant Arun, Nanggroe Aceh Darussalam and Bangkanai power plant, Central Kalimantan with the value of each project approximately 100 million euros.

## IV. RESEARCH AND METHODOLOGY

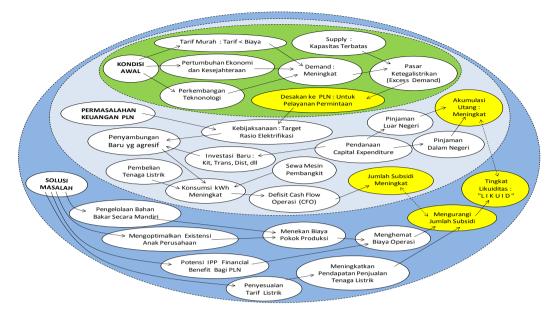
#### Methods of analysis

In this study used several analytical approaches as finance Financial Management: Theory and Practice (Eugene F. Brigham and Michael C. Ehrhardt, 2001) and economic analysis as Managerial Economic: Analysis and Strategy (Evan J. Douglas, 1992), namely: (a) The liquidity analysis, using some relevant indicators such as curret ratio, cash ratio, acid test ratio and working capital. (b) Analysis of capital structure, using indicators Debt to Equity ratio, (c) profitability analysis, using indicators of return on investment (ROI) and return on equity (ROE), (d) analysis of the cost structure in the measurement of cost efficiency, the calculation of cost of goods supply, and electricity tariff policy, using an approach based on full costing and variable costing, (e) tariffs, based on cost plus margin approach and the marginal cost pricing, (f) contribuition margin (CM), is used for the expansion of wisdom, service improvement, and capacity optimization. In the case of CM> 0 then increase the sales volume will increase profits or reduce losses, and (g) graphical analysis of market equilibrium and mathematis, Qd = F (Xi), Qs = f (Xi) where Qd: the number of requests, Qs: number offers, and Xi: an explanatory variable.

#### Solutions to problems,

## V. RESULT AND DISCUSSION

Several alternatives can be considered to overcome the problems of debt and the amount of subsidy, but should be supported with financial management competencies PLN prepares strategic planning, policy formulation and computation-oriented careful balance of financial interests and the interests of the service. Alternatives are considered to have a significant influence on the issue of subsidies and debt settlement, as described in the PLN framework through a systems approach, namely (a) the management of fuels independently from upstream to downstream, (b) empowerment subsidiaries, (c) to optimize the potential IPP gain financial benefit in the form of income or cost saving opportunity, and (d) socialization strategies and electricity tariff adjustments, as described in point 1 to point 4 below.



1. Independently Fuel Management from Upstream to Downstream

Fuel costs as a component of operating expenses as PLN largest financial statements in 2012 and 2013 reached Rp 136.5 billion and Rp 147.6 billion, respectively 67.2% and 66.8% of the operating costs. PLN has a chance of operating cost savings with diversify vertically through the development of the fuel management independently. Mastery of fuel sources such as coal mines and gas, transport advice and suggestions ownership other supporting operational PLN managed as a unit or administrative unit. It is intended to ease administrative processes, decision-making speed, ease of coordination of funding, operational management is more practical and not constrained procurement process, making it more effective in achieving cost efficiency and reduce the amount of subsidy. Management through a subsidiary or a partnership with the private sector is less practical than the PLN operational decision-making, funding difficulties and constrained by PLN Center in the procurement process. Management of upstream fuel or independently is not new in the business of electricity power and has been practiced in various countries such as EGAT in Thailand at the same time managing a coal power plant, EDF / GDF French electricity and gas companies in the holding company, even TNB Malaysia has a coal mine in Borneo once ownership of the means of transport which are managed independently, and so on. PLN has taken the management of the fuel business is still relatively small in scale but its effectiveness is not significant to PLN operating cost structure as set forth in this concept. Independent fuel management with a business model as a subsidiary (AP) or a partnership with a private company is kurag contains many flaws and effectively to achieve the target cost of fuel efficiency. Compare if the management of fuel operations conducted independently of PLN, the shorter administrative and financial transactions only through a memorandum book between units. Fuel management concept intended impact on (a) the significant operating cost savings, (b) avoid the risk of price fluctuations, (c) greater supply certainty suit operational requirements generation, and (d) the business is managed on an economical scale or large-capacity. When the fuel business management in private and then sell to PLN with a decent return, then it should PLN is superior because (a) able to reduce marketing margins, (b) eliminating the distribution network gradually, (c) eliminate the margin and private inefficiency during this is charged to PLN. Vertical diversification strategy independent fuel management will have the support of government and the House of Representatives by reason of (a) the efficiency of the national electricity power management, (b) reduce the cost of production, and (c) reducing the amount of subsidy. In this strategy needs to support funding for cost savings generated very appropriate in terms of financial and operational PLN. Based on the feasibility, then funding more easily and attract investment from the banking side. For a smooth and successful investment fund that strategy, it is necessary to support financial management PLN.

# 2. Development Subsidiary

Development subsidiary or AP can help reduce production costs and increase liquidity PLN. Business development investment fund can use AP to potential accounts in the amount of PLN Center trillions of dollars. In terms of debt repayment Central PLN affect liquidity but the scheme as an alternative for the AP covered the possibility of obtaining a bank loan or a bond as per the requirements of global bonds issued abroad PLN. AP receivables potential utilization scheme include (a) the debt through the AP to PLN Center, then be compensated as a repayment mortgage repayment PLN Center to AP. (b) development by PLN Center installation and

handover of assets to debt settlement compensation PLN Head to the AP. In this case is still recorded as assets in the consolidated financial statements PLN so it does not conflict with the use of the loan which requires fixed assets in PLN or not delivered to the other party. (c) point b the same premises but the early stages of AP as an executor or operations and maintenance contractors or OM, the next stage of asset handover to AP as compensation for debt settlement PLN Head to the AP. (d) Central PLN funding, development practitioners and OM by the AP, the next stage of asset handover to AP as compensation for debt settlement PLN Head to the AP, (e) financing of PLN Center, implementing building by the AP and handover of assets as compensation for debt settlement to PLN Center AP. The above scheme is used for the development of the core business of investment alternatives AP with an increase in generating capacity, and manage fuel procurement independently from upstream to downstream. AP development and production cost efficiencies achieved by administering the allocation of quotas for the maximum production that is economically eligible (ACAP - ACIPP) <AFCAP, where ACAP: cost per kWh average product AP, ACIPP the average cost of production of IPP, and AFCAP: average AP fixed cost, with a note that without the allocation of production to remain AFCAP AP then calculated as operating costs PLN consolidated basis.

## 3. Income Opportunity Power Purchase

Contract purchase of electricity from independent power producers or purchasing power (IPP) IPP investors very profitable while PLN lose some income opportunities and cost savings. Tanaga purchases of electricity by 2012 had reached 50 562 Gwh or 38% of the production PLN to contribute around 25% of total production as as www.pln.co.id PLN Statistics 2012. Electric power purchase contracts with IPPs should be an opportunity for financial gain PLN benefits to ease the financial burden of PLN. PLN's financial management discretion to be otherwise is to help the cash flow situation of the IPP at PLN experiencing financial difficulties. Power purchase contract is indirectly helping IPPs cash flow to be able to pay the mortgage debt with the bank using a higher purchase rate at the initial stage until the debt is paid off the bank for 7-8 years. This is detrimental to PLN for higher rates in the early stages into operating costs and subsidies. PLN supposed to seek financial gain benefits as income or cost saving opportunity for the cooperation of IPP power purchase due to (a) the contribution of PLN in pricing policy, (b) the IPP obtain a very decent return, (c) PLN loss and cash flow difficulties because they have to pay higher rates in the early stages during IPP debt repayments. (d) After the debt is paid off period to 7-8 IPP investor becomes the owner of 100% of the assets invested only 30% - 35%, so it is able to obtain equity investment returns and the number increased to about 300% of the initial investment, (e) began operational asset to periods of 9 to benefit fully for IPP and (f) IPP is able to expand its existing capacity at least equal to open opportunities for the ease of obtaining bank loans and investors already have existing assets as collateral. Financial benefits of the scheme can be either (a) compensation in the form of ownership or as a shareholder, (b) significant tariff reductions, tariff component A is replaced with a certain amount of a reasonable margin, (c) imposes a certain amount of debt above which is considered as overpayment PLN during the debt repayment period IPP, and (d) the IPP assets belong to PLN after a certain period eg 20 years or sodium absorption ratio must wait a period of 25 to 30 years, and others that PLN obtain financial benefits that can reduce operating costs or subsidy PLN and improve liquidity in the future, while reducing dependence on foreign debt.

## **3.** Strategies Socialization and Electricity Tariff Adjustment

Need an aggressive effort to realize the adjustment of electricity tariff, starting from PLN internal financial management discretion to present financial statements that is more realistic in a loss position significantly. The technique is done with an alternative presentation of (a) through the additional information that describes the position of profit / loss of PLN without subsidies, and (b) the accounting discretion change recording system for the assistance of the state budget as additional paid-in capital is not treated as income or subsidy. The magnitude of the loss was no state budget subsidies should be socialized to convince the society that suffered losses in the amount of PLN very significant. Simultaneously informed financial difficulty because of PLN into debt in an amount sufficient material beyond the ability liuiditas or operating cash flow. Funding investments financed with debt needs to be informed in a transparent manner to indicate that the company needed tariff adjustments not only cover operating costs but also to pay maturing financial obligations. The information presented so far has shown the success and profit of PLN successfully obtain new loans from abroad, is only momentary success of the show, because PLN will have difficulty socializing when a rate increase.

## Marginal cost pricing

Rate calculation can be performed with marginal cost pricing approach that resulted in the price level or the rate at which the optimum conditions of maximum profit or minimum loss.

#### **Rate discrimination**

Based on the determination of the average rates corresponding calculation of marginal cost pricing is, furthermore chosen scenario determination of tariff according to consumer groups based on cross subsidies. Technically rates with cross subsidy system can be done with a tariff approach to discrimination in accordance with the level of economic capability of customers and still maintain the average tariff on the optimum conditions mentioned above.

## VI. CONCLUSSION AND LIMITATION OF STUDY

#### Conclussion

Based on the description above it can be concluded, (a) the amount of debt in 2012 and 2013 PLN spectacularly increased to Rp 390.1 billion and Rp 462.6 billion. It is very alarming when compared to 2007. namely short-term liabilities and long-term only reached Rp 116.5 billion. The amount of debt in 2012 and 2013 is included under finance lease debt of Rp 111.3 billion and Rp 134.6 billion, which is sourced from the debt related to the IPP and CJP ISAK 8 (Note 2), (b) the company did not have the ability to resolve its debt cash flow future. This would leave the burden of the financial crisis for financial management PLN future, (c) the amount of the subsidy further burden state finances, in 2012 and 2013 reached Rp 103.3 billion and Rp 101.2 billion, while the profitability performance of PLN same period profit only reached Rp 3.2 billion and Rp 29.6 billion loss. When subsidies are treated as additional capital as at other state governments, the PLN losses in 2012 and 2013 amounted to Rp 100.1 billion and Rp 130.7 billion. Need transparency and dissemination of information PLN's financial condition in order to obtain a sympathetic and understanding of the community, as well as formulate a tariff structure based on marginal cost pricing to generate optimum condition. These conditions will result in maximum profit when the company's earnings performance and position of the minimum loss when the company suffered a loss position, (d) financial management PLN require long-term financial planning and consolidated financial road map is able to describe in a comprehensive and applicable PLN, (e) completion PLN's financial problems can be done if the financial management policies supporting alternative fuel management independently, enabling the generation subsidiary, utilizing the potential income opportunity or cost over the contract for the purchase of electricity from IPPs, and socialization strategies and optimal tariff adjustment, (f) financial management PLN should implement the basic principles of financial management in order to avoid potential problems further complicate the company's future financial performance.

#### Limitation of study

This study uses secondary data and primary data through a variety of sources such as financial reports and statistics published by *www.pln.ci.id PLN*, other information obtained through media information and interviews of the parties involved. This study has limitations in terms of patterns of thinking PLN's financial management, strategy and wisdom that have an impact on PLN's financial deterioration of the present and the future. This study has not been able to predict the numbers of PLN's financial future projections, as electricity will not have a financial road map consolidated, comprehensive and applicable. PLN's financial management would future generations have a strong competence and is able to generate strategies and policies to address the financial problems of PLN and alleviate the burden of state budget subsidies.

#### REFERENCES

- [1]. Anwar Nasution.2013. Dampak Ekonomi Subsidi Energi. 2013. <u>www.regional.kompas.com</u>. Jakarta
- [2]. Arthur J. Keown. 2008. Manajemen Keuangan. Edisi 9, Bab 1. Penerbit Indeks. Jakarta
- [3]. Augene F. Brigham and Michael C. Ehrhardt. 2001. Financial Management : Theory and Practice. Amason. Com. Canada
- [4]. Dominic Salvatore. 2011. Microeconomics. Schaum's Outlines Series. Mc Graw Hill. New York
- [5]. Evan J. Douglas. 1992. Managerial Economic : Analysis and Strategy. Amason. Com. Canada
- [6]. Hal R. Varian. 1992. Microeconimic Analysis. 6<sup>th</sup> Edition. Publisher W.W. Northan & Company. Amazon Canada
- [7]. Jae K. Shin and Joel G. Siegel. 2007. Financial Management. Third Edition. Shaum's Outline Series. Mc Graw Hill. New York
  [8]. Jae K. Shin and Joel G. Siegel. 2012. Managerial Accounting. Second Edition. Schaum's Outline Series. Mc Graw Hill. New York
- [9]. Joel J. Lerner. 2007. Book Keeping and Accounting. Fourt Edition. Schaum's Outline Series. Mc Graw Hill. New York
- [10]. Ken Boyd. 2013. Cost Accounting. John Wiley and Sons, Inc. New Jersey
- [11]. Robert Graham. 2013. Managerial Economic. John Wiley and Sons, Inc. New Jersey
- [12]. Van Horn, James C; Wachowicz, John M., Jr. 2006. Fundamental of Financial Management Prinsip-prinsip Manajemen Keuangan. Edisi 12. PustakaBersama Universitas Paramadina. Jakarta
- [13]. www.amiesuzako.blogspot.com, 30 Januari 2012, judul "Utang RI tahun 2000-2011"
- [14]. www.bisnis.liputan.com tanggal 29 Agustus 2013, judul "4 paket lengkap kebijaksanaan ekonomi pemerintah"
- [15]. <u>www.citizen.forumkeadilan.com</u>, 18 Juli 2013, judul "Ini dia Kementerian / BUMN dan Lembaga Negara juara menghabisi utang luar negeri"
- [16]. <u>www.dedewpesek.blogspot.com</u>. 16 April 2013. Judul : "Laporan keuangan PLN 2001-2011"
- [17]. <u>www.dettwaningrum.blogspot.com</u>, 8 Nopember 2012, judul "Kebaikan dan keburukan utang luar negeri"
- [18]. www.esdm.go.id. Desember 2012. Statistik Listrik 2012. DJK. KESDM. Jakarta

- [19]. www.herryakman.blogspot.com/2011/19/konsep-biaya.htm/ tanggal 13 September 2011, judul "Akuntansi Manajemen : Konsep Biaya"
- [20]. www.id.wikipedia.org/wiki/Neraca\_Pembayaran, 4 September 2013), judul "Neraca pembayaran"
- [21]. www.indonesiafinancetoday.com, PLN raih komitmen pinjaman 200 juta Euro. 26 Juli 2013. Jakarta
- www.merdeka.com tanggal 20 Oktober 2012, judul "Kinerja PLN buruk, Marzuki salahkan Dahlan Iskan". [22].
- [23]. www.ollydondokembey.com tgl 17 Agustus 2011, judul "Perbaikan kinerja PLN ditunggu"
- [24]. www.pln.co.id PLN Statistic. 2012. PT Perusahaan Listrik Negara (Persero). Jakarta.
- www.pln.co.id, 25 Februari 2014, judul : "Laporan keuangan PT PLN (Perseo) tahun 2013" www.rinanews.com tanggal 30 Juli 2011, judul " SBY bilang subsidi kian merusak perekonomian" [25].
- [26]. www.sofyandi-simbolong.blogspot.com, 7 Juli2013, judul "Indonesia dalam jebakan utang luar negeri"
- [27]. [28]. www.tammzt.wordpress.com, tanggal 15 Desember 2011, judul "Konsep biaya dan lingkungan ekonomi"
- [29]. www.tempo.co. 19 Oktober 2010, Judul : Belanja PLN andalkan utang luar negeri"