Analysis of the Implementation Effects of Accrual-Based Governmental Accounting Standards on the Financial Statement Qualities

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Abstract
This study is aimed to examine the effects of implementation of accrual-based governmental accounting standards on the financial statement qualities. The research was carried out by census sampling using 524 respondents that were come from the Local Government Units in the seven districts around North Sumatera, i.e. Langkat, Binjai, Asahan, Medan, Batu Bara, Samosir and Humbang Hasudutan. SmartPLS was then used in data analysis. The main problems is about how difficult government coordinate the human resource in the district or city government especially in implementation of accounting system. Methods of data analysis used in this research is testing the quality of the data, outer model and inner model test. Outer model consists of convergent validity, discriminant validity and reliability test and inner model consists of adjusted R square and Predictive Relevance (Q²). The result of this research is partially human resource, software and hardware and understanding of government standard accounting accrual based have effect to implementation government standard accounting accrual based.

Keywords: governmental accounting standard, implementation, human resource, hardware and software.

INTRODUCTION
As a basis for fundamental changes in reform in the financial sector, Law Number 17 of 2003 concerning State Finance, Law Number 15 of 2004 concerning Inspection of Management and Responsibility for Regional Finance is established. Regional Financial Management Guidelines, the government issued Minister of Home Affairs Regulation No. 13 of 2006 which was renewed with Permendagri Number 59 of 2007 and Permendagri Number 21 of 2011.

The Government has issued Government Regulation (PP) Number 71 of 2010 concerning Government Accounting Standards (SAP). The issuance of this PP marked the end of PP No. 24 of 2005. In line with that, the Minister of Home Affairs Regulation (Permendagri) was also issued No. 64 of 2013 concerning the Application of Accrual-Based Government Accounting Standards to Regional Governments. Accrual-based SAP implementation must be carried out carefully with thorough and structured preparation
related to regulations, systems and human resources (HR) and assets. The success of accrual-based SAP implementation is needed so that the government can produce financial statements that are more transparent and accountable (Ardiansyah, 2013).

The use of accrual basis is not only for the preparation of financial statements, in some countries it has used the accrual basis both for the preparation of financial reports and for budgeting such as New Zealand, Australia and the United Kingdom. In OECD member countries, the accrual basis has so far been more accepted for financial reporting than for budgeting purposes. Two reasons often raised above this are first, accrual budgeting is believed to pose a risk of budget discipline. Political decisions to spend money must be linked to when the expenditure is reported in the budget. Only the cash base can fulfill this. The second reason, namely that legislators tend to be resistant to adopting accrual budgets because of the complexity of the accrual concept itself.

The success of accrual-based SAP implementation will improve the quality of LKPD, which is the responsibility of government finances to the public. The demand for transparency and openness from the public to the government continues to increase along with the advancement of information technology. This is possible considering that the Government of Indonesia has gradually applied the online system for certain financial data. The government has applied SAP accrual based, since January 1, 2015, in accordance with the mandate of the Act, but in practice there are still many unclear interpretations found, for example about revenue recognition, there is still much recognition of income only recorded based on cash while many accruals are ignored. Likewise, the policy for eliminating doubtful accounts in the guidelines issued is still very unclear, and is still difficult to implement. The problem of assets is also quite a lot of problems, considering that the acquisition price is unclear, so the value of the depreciation expense becomes less precise. Accrual spending problems are also still a lot of problems.

However, the most crucial problem in the application of accrual-based SAP is the human resources that operate a system and apply it to all accounting activities within the government. Basically, as is generally known that the capacity or background of the education of employees in the government environment is still very minimal originating from the accounting department. This is not a simple matter, because it will greatly affect the performance of the agency. Thus, there are still very many urgent matters to be addressed, in order to support this accrual-based SAP implementation.

The existence of human resources certainly also requires supporting facilities called a "system". The system in question is a computerized system so that in terms of the processing
of financial statements, it will have an impact on getting better, more effective in the process, more neat, and more dominant in its accuracy. A support system will be useful in the application of accrual-based SAP, when operated by qualified human resources. Thus, the application of accrual-based SAP will be very good in its application. Supposedly, a system that has implemented SAP accrual-based has also been designed by parties who are already credible in the field of accounting.

Next is the understanding of SAP accruals, basically it is not a simple problem. This is also almost a starting point related to the condition of human resources in its operation. How not, if every employee specialized in accounting or finance has not been able to understand related to the accrual-based SAP. Where, in fact, those who are supposed to occupy positions in the accounting or finance section should indeed have an accounting education background. Adjustments related to this are not easy things but the conditions are very urgent.

LITERATURE REVIEW

The implementation of the regional government financial accounting system is the main system of the regional financial management accountability system. The Local Government Financial Report (LKPD) produced from the accounting system is a form of accountability for APBD implementation, financial performance, and financial position of the Regional Government. The enactment of a law package in the field of State finance shows that the responsibility of regional financial management is required in the form of LKPD in accordance with the applicable Government Accounting Standards (SAP). The information presented must be in accordance with SAP including information about the realization of the APBD in accordance with the budget format authorized by the legislature, information about financial performance, information on the position of wealth and obligations of the regional government. Law No. 1 of 2004 concerning State Treasury further clarifies that financial statements must be prepared based on the accounting process that must be carried out by each Budget User and Budget User Proxy and the State/Regional General Treasurer. In connection with that, the central government and every local government need to carry out accounting in a system whose guidelines are set by the Minister of Home Affairs.

In general accounting is distinguished by private sector accounting and public sector accounting or government accounting. Sugiyanto et al (1995) suggested that accounting consists of 3 main fields, namely:

- Commercial Accounting
Accounting data is used to provide financial information to management, owners of capital, investment, creditors and other parties with an interest in the company such as the government for the purpose of tax determination.

- **Government Accounting (Government Accounting)**
  
  Accounting data is used to provide information about economic transactions and government finances to the executive, legislative, judiciary and the public. Government accounting is distinguished by central government accounting and regional government accounting which is often referred to as regional financial accounting. Regional government accounting consists of provincial government accounting and district / city government accounting.

- **Social Accounting**

  Social accounting is a special accounting field to be applied to institutions in the macro sense that serves the national economy.

  Regional financial accounting is one part of accounting. Therefore, in regional financial accounting there is a process of identifying, measuring, recording, and reporting economic financial transactions that occur in local governments. There are several recording systems that can be used, namely the system of recording single entry, double entry and triple entry. One thing that distinguishes accounting and accounting is that accounting only uses a single entry recording system, while accounting can use double entry and triple entry.

  Government accounting standards are known to two entities, namely reporting entities or Regional Financial Management Officers (PPKD) and accounting entities or Regional Work Units (SKPD). The reporting entity is a government unit that consists of one or more accounting entities which, according to the provisions of legislation, must present an accountability report in the form of general purpose financial statements. The accounting entity is a unit of government that manages the budget, wealth, and obligations that carry out accounting and present financial statements on the basis of the accounting held. PPKD has the task and function of managing the APBD and acting as the Regional General Treasurer. In carrying out these functions and tasks PPKD is also required to carry out accounting so that it is an accounting entity and is therefore obliged to prepare PPKD financial reports. In PP No. 58 In 2005 it was also stated that PPKD had the task of carrying out the management of the Regional Budget and acting as the Regional General Treasurer who simultaneously held BUD accounting.

**RESEARCH METHOD**
The population in this study are several SKPD in North Sumatra Province consisting of the government of Langkat Regency, Medan City government, Binjai Regency government, Samosir Regency government and Humbang Hasudutan District government which has accounting functions with accounting entities and reporting entities both PPK-SKPD, treasurer expenditure and financial staff. Thus the number of samples in this study was 415 people. Where, each SKPD consists of 1 treasurer, 1 PPK person, 1 PPKA person, and 1 PA person.

This study uses data analysis methods using SmartPLS version 3.0 software. which is run with computer media. PLS (Partial Least Square) is a variant-based structural equation (SEM) analysis that can simultaneously test measurement models while testing structural models. The measurement model is used to test validity and reliability, while the structural model is used to test causality (testing hypotheses with prediction models). Furthermore, Ghozali (2006) explains that PLS is an analytical method that is soft modeling because it does not assume data must be of a certain scale, which means the number of samples can be small (below 100 samples).

Testing the hypothesis in this study using Partial Least Square (PLS) analysis tools. PLS is structural equation analysis (SEM). PLS used by researchers is PLS with version 3.0 software. SEM (Structural Equation Modeling) is an integrated approach between factor analysis, structural models and path analysis. In the SEM model 3 activities can be carried out simultaneously, namely checking validity and reliability instruments (equivalent to confirmatory analysis), testing the relationship model between latent variables (equivalent to path analysis) and obtaining useful models for estimates (equivalent to structural models or regression analysis) Prasastika et al (2015).

Test Convergent Validity to measure the level of accuracy of indicators or dimensions by measuring the magnitude of the correlation between constructs and latent variables. To measure convergent validity, standardized loading factors are used that describe the magnitude of the correlation between each indicator and the construct. The value of loading factor above 0.7 is expressed as an ideal measure or valid as an indicator in measuring constructs, values above 0.5 can still be accepted while values below 0.5 must be excluded from the model.

Discriminant Validity Test (Discriminant Validity) to find out whether the indicators of a construct do not correlate highly with indicators from other constructs. Discriminant validity from the outer model of this study is a reflective model, which is a model that shows a causal relationship originating from latent variables to indicators, which are evaluated
through cross loading. The size of cross loading is by comparing the indicator correlation with other constructs. Besides through loading comparison with cross loading, discriminant validity testing needs to be strengthened by examining AVE and AVE root ratio with correlations between latent variables. Convergent validity of the measurement model can be seen from the correlation between the indicator score and the variable score.

Reliability testing is a tool to measure the consistency of an instrument in sequence. Reliability shows accuracy, consistency and accuracy of a measuring instrument in measuring Hartono and Abdillah (2015). Reliability testing in PLS can use two methods, namely cronbach's alpha and composite reliability. Cronbach's Alpha is a reliability coefficient that shows how well items in a collection are positively correlated with each other. The closer Cronbach's Alpha with 1, the higher the consistency.

The structural model (inner model) is a structural model to predict the causality relationship between latent variables. Through the bootstrapping process, statistical T test parameters are obtained to predict the existence of a causality relationship. The structural model (inner model) is evaluated by looking at the percentage of variance explained by the value of R2 for the dependent variable using size. The structural model (inner model) is a structural model to predict the causality relationship between latent variables.

The R-square PLS model can be evaluated by looking at predictive Q-square relevance for the variable model. The Q-square measures how well the observations produced by the model and also the estimated parameters. The Q-square value greater than 0 (zero) shows that the model has a predictive relevance value, while the Q-square value less than 0 (zero) shows that the model lacks predictive relevance.

Hartono (2008) in Jogiyanto and Abdillah (2009) explained that a measure of the significance of the support of hypotheses can be used to compare the values of t-table and t-statistics. If the t-statistic is higher than the T-table value, it means that the hypothesis is supported or accepted. In this study for a 95 percent confidence level (alpha 95 percent), the t-table value for the one tailed hypothesis is > 1.68023. The PLS (Partial Least Square) analysis used in this study was carried out using the SmartPLS version 3.0 program, which is run with computer media.

**DISCUSSION**

Based on the results of the convergent validity test which is seen through the outer loading value, it can be concluded that all the questions on each indicator in each variable of this study are valid. Thus, all points of the question can be used as items that are properly
used to measure the implementation of accrual-based SAP in North Sumatra Province. The lowest outer loading value is 0.727 while the range of values used to see the value of convergent validity is 0.500 to 0.700. Thus all question points on each indicator are valid. The higher the value of outer loading is generated, the more valid each question will be used. In addition, the outer loading is also a benchmark to find out whether the questions distributed to the respondents are indeed easy to understand or not. Thus, if it is easy to understand, all the questions should be valid. Thus, the value of validity is very important and has a huge effect on the results of a study.

The results of the discriminant validity test can be seen from the cross loading value where all the indicators in this study will have a validity value, so that what will be considered is the correlation between one construct and the indicator. Thus, there will be more attention to the various values of higher validity of each relationship between the construct and the indicator. The most expected thing is that latent constructs predict indicators on their blocks better than other block indicators. Next, the researcher presents a table of results of the discriminant validity test which can be seen through the cross loading value of all variables. Then, the cross loading value between variable constructs and also the indicators of each variable can always be compared with each other to see the accuracy of the placement of indicators for each of these variables.

Based on the results of the reliability test, it can be seen through a table that displays the cronbach alpha value and composite reliability. All of Cronbach's alpha and composite reliability values in the results of the reliability test table are in the range of 0.700 to 0.800, so through this table a conclusion can be drawn that all variables in this study are reliable. Thus, so are all indicators in this study that are measured by the questions so that it can be said that all indicators in this study are also reliable. Thus, the results of the data quality test in this study which consists of validity and reliability are already fulfilled so that all the questions in this study are valuable and reliable. cronbach alpha which has the lowest value in this study is 0.831 which is located on the variable of applying accrual-based government accounting standards manually. The following table shows the test results of the coefficient of determination that is generated after the data processing with SmartPLS:

<table>
<thead>
<tr>
<th>ISAP (Y)</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.542</td>
<td>0.627</td>
</tr>
</tbody>
</table>
Based on the test results of the coefficient of determination, it can be seen that the value of R Square is equal to 0.542 and the value of Adjusted R Square is 0.627. Thus, the value of R Square illustrates that all the independent variables in this study are able to represent the dependent variable, namely the accrual-based SAP implementation of 54.2%, which means that this variable is in a weak condition. Thus, the independent variables in this study consisting of human resources, supporting facilities, and accrual-based understanding of SAP are able to represent SAP accrual-based implementation variables weakly and are very possible because of the large number of samples and the relatively complex number of variables. The following is a table of predictive relevance results generated after the data processing with SmartPLS:

<table>
<thead>
<tr>
<th>Predictive Relevance Test Results</th>
<th>ISAP (Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISAP (Y)</td>
<td></td>
</tr>
<tr>
<td>SDM (X1)</td>
<td>0.413</td>
</tr>
<tr>
<td>SP (X2)</td>
<td>0.275</td>
</tr>
<tr>
<td>PSAP (X3)</td>
<td>0.498</td>
</tr>
</tbody>
</table>

Based on the table, it can be seen that there is a direct relationship between each independent variable on the dependent variable. Human resources is the first independent variable in this study that has a strong relationship to the dependent variable, namely the implementation of accrual-based government accounting standards that can be proven by a number of 0.413. Supporting means is the second independent variable in this study which has a weak relationship to the dependent variable, namely the implementation of accrual-based government accounting standards that can be proved by a number of 0.275. Understanding of government accounting standards is the third independent variable in this study which has a strong relationship to the dependent variable, namely the implementation of accrual-based government accounting standards that can be proven by a number of 0.498. The following is a table of results of hypothesis testing generated after the data processing with SmartPLS:

<table>
<thead>
<tr>
<th>Hypothesis Test Results</th>
<th>Original Sample (O)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDM (X5) -&gt; ISAP (Y)</td>
<td>0.027</td>
<td>0.001</td>
</tr>
<tr>
<td>SP (X1) -&gt; ISAP (Y)</td>
<td>0.034</td>
<td>0.015</td>
</tr>
<tr>
<td>PSAP (X2) -&gt; ISAP (Y)</td>
<td>0.113</td>
<td>0.010</td>
</tr>
</tbody>
</table>
Based on the results of the hypothesis test, it can be seen that human resources are the first independent variables in this study which have a positive and significant effect partially on the accrual-based SAP implementation, and this can be proven by the original sample value of 0.027 and significance of 0.001 < 0.05, which means that human resources have a positive effect on accrual-based SAP implementation.

Supporting means is the second independent variable in this study which has a positive and significant effect partially on the accrual-based SAP implementation, this can be seen through the statistical T value which is equal to 2.173 > t table value which is 1.964 and this can be proven by the original sample value of 0.034 and significance of 0.015 < 0.05, which means that the supporting facilities in this study have a positive effect on accrual-based SAP implementation.

Understanding of government accounting standards is the third independent variable in this study which has a positive and significant effect partially on the accrual-based SAP implementation, this can be seen through the statistical T value that is equal to 2.778 > t table value which is 1.964 and this can be proven by original values the sample is equal to 0.113 and significance of 0.010 < 0.05, which means that the understanding of accrual-based government accounting standards is something that is highly expected of every employee, which is why the government always provides training, debriefing and learning related to understanding of SAP-based this accrual.

Based on the results of data analysis in the previous section, the results obtained that human resources affect the accrual-based SAP implementation. Human resources are expected to always be improved properly, the quality of human resources is a benchmark for the success of this accrual-based SAP implementation. In accordance with the questions contained in the research questionnaire that the variables of human resources intended in this study are related to how they are able to understand their main tasks, accrual-based procedures and SAP preparation methods, how to make accrual-based financial statements, and even how self-effort in improving the quality of personal resources which is always a demand for both the world of work and the international community. Good human resources are those who have a match between their fields of knowledge and the position they obtain in order to maximize their abilities and qualities in carrying out the tasks that have been given. Thus, a good accountant is an accountant who is able to apply his accounting in running the accrual-based accounting system.

Supporting tools intended in this study are software and hardware that can be used in order to improve the capabilities of each employee in the application of accrual-based SAP.
Not only to improve capabilities but also will always provide the effectiveness of time in the process of processing, convenience, and being able to improve the fairness of the financial statements produced. However, the problem is that the supporting facilities have no influence on the implementation of accrual-based SAP carried out in five regencies/cities in North Sumatra Province. Based on the data tabulation, then data analysis, and comparing the results of these tabulations with the $t$ table value, it was found that the supporting facilities did not have an influence on the accrual-based SAP implementation. Supporting means intended are only tools or applications that will provide efficiency, effectiveness and economics in the process of producing output in the work process. The thing is more than that, the most expected is that the results obtained from the supporting facilities will still be analyzed by the applicants, meaning that the tools used can produce output that has errors, so that the results of the analysis need to be done.

Understanding of accrual-based SAP is the third independent variable in this study, understanding of accrual-based SAP is an absolute measure to see the success of accrual-based SAP implementation. This understanding can be fostered from the efforts made by employees to try to understand SAP that has been issued by the government in writing, participate in various training related to SAP accrual-based understanding and the most important thing is the willingness of employees of local government agencies to always learn and improve their understanding. The fact is that when the research was conducted, there were also several employees in local government agencies who were not young anymore, so it was very possible that their ability to improve understanding was very weak and this was a problem. Thus, the understanding possessed by human resources must always be improved in order to produce human resources that understand in the application of accrual-based SAP. In simple terms, studying the accrual-based SAP will be very different from studying cash-based accounting, thus each accountant who sits on a government bench is expected to always maximize his ability to be able to make financial reports in accordance with accrual-based government accounting standards.

**CONCLUSION**

Human resources, supporting facilities, and understanding of SAP accrual-based have a partial effect on the implementation of accrual-based Government Accounting Standards (SAP) in the government of North Sumatra Province. Thus, the application of accrual-based SAP is always expected to run well, with the capacity of human resources in accordance with
the various challenges faced in the future, the demands of compatible supporting facilities and of course accrual-based SAP understanding that must always be improved by applicants.

REFERENCE
Khan, A. 2009. *International Monetary Fund, Fiscal Affairs Department, Teknical notes and manuals Transition to Accrual Accounting*, Authorized for distribution by Carlo Cottarelli.
Republik Indonesia, *Undang-Undang 17 Tahun 2003 tentang Keuangan Negara.*
............................., *Undang-Undang Nomor 32 Tahun 2004 tentang Pemerintah Daerah.*
............................., *Undang-Undang Nomor 1 Tahun 2004 tentang Perbendaharaan Negara.*
............................., *Undang-Undang Nomor 33Tahun 2004 tentang Perimbangan Keuangan antara Pemerintah Pusat dan Daerah.*
............................., *Peraturan Pemerintah Nomor 24 tahun 2005 tentang Standar Akuntansi Pemerintahan.*
............................., *Peraturan Pemerintah Nomor 71 Tahun 2010 tentang Standar Akuntansi Pemerintahan.*
............................., *Peraturan Menteri Dalam Negeri Nomor 13 tahun 2006 tentang Pedoman Pengelolaan Keuangan Daerah.*
............................., *Peraturan Menteri Dalam Negeri Nomor 17 tahun 2007 tentang Pedoman Pengelolaan Keuangan Daerah.*

Ryan, Christine, Dunstan,K., Stanley, T. 2010. *Local Government Accounting Standard Setting in Australia, Did Constituents Participate*. Queensland University of Technology. School of Accountancy George St Brisbane Q 4000, Email: cm.ryan@qut.edu.au