

CASH MANAGEMENT IN INDONESIAN LOCAL GOVERNMENTS: A STUDY ON THE RELATIONSHIP BETWEEN GOVERNMENT PROFILE AND CASH HOLDING

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ABSTRAK

This study aims to examine the relationship between local government size, budget revision, beginning cash balance, current budget absorption and regional fiscal capacity and cash holding in local governments of Aceh Province - Indonesia. The sample in this study is 23 districts cities in Aceh Province and data is collected from financial reports of the studied districts/cities between 2011 and 2015. Thus, the total observations in this study are 115 districts-years. Pearson Correlation method is employed to analyze the data. This study demonstrates that the beginning cash balance, current budget absorption, budget revision, local government size have a positive association with cash holding, while the fiscal capacity has a negative relationship with cash holding in the studied districts and cities within Aceh Province - Indonesia. Based on this finding, a policy on cash management and cash holding can be proposed to ensure the optimization of cash holding in local government and avoid too much idle money.
KEYWORDS: government size, budget revision, cash holding, current budget absorption, fiscal capacity

Penelitian ini bertujuan untuk menguji hubungan antara ukuran pemerintah daerah, perubahan anggaran, saldo kas akhir tahun sebelumnya, penyerapan anggaran tahun berjalan dan kapasitas fiskal daerah dengan saldo kas akhir tahun pada kabupaten/kota di Provinsi Aceh - Indonesia. Sampel dalam penelitian ini adalah 23 kabupaten / kota di Provinsi Aceh dan data dikumpulkan dari laporan keuangan dari kabupate/ kota yang diambil antara tahun 2011 dan 2015. Dengan demikian, jumlah pengamatan dalam penelitian ini adalah 115 kabupaten/ kota-tahun. Uji Pearson correlation digunakan untuk mengetahui hubungan antar variabel tersebut. Penelitian ini mendapatkan hasil bahwa saldo kas awal tahun, penyerapan anggaran tahun berjalan, revisi anggaran, ukuran pemerintah daerah memiliki hubungan positif dengan saldo kas akhir tahun. Sementara itu, kapasitas fiskal memiliki hubungan negatif dengan saldo kas akhir tahun di kabupaten dan kota yang dipelajari di Provinsi Aceh - Indonesia. Berdasarkan temuan ini, kebijakan tentang manajemen kas dan uang tunai dapat diusulkan untuk memastikan optimalisasi jumlah kas pada akhir tahun dan menghindari terlalu banyak kas menganggur (idle money) di pemerintah daerah.

KATA KUNCI: ukuran pemerintah, revisi anggaran, saldo kas akhir tahun, penyerapan anggaran, kapasitas fiskal

1. INTRODUCTION

One of the most important assets in all organization including in governments and companies is cash (Abdullah & Muthia, 2017). Cash represents the amount of money kept in safe box and a bank that can be used instantly to finance operational expenses or take investment opportunity. In business literature, cash on hand and cash on bank are categorized as cash holding. Meanwhile, cash management refers to management effort to make sure that the organization has sufficient liquidity to pay its bills, to avoid unintended consequences or minimize risks and to align with organization financial policy (Williams, 2009).

Cash holding is a crucial topic both in accounting literature and business practices. Factors that shape cash holdings need to be investigated as cost holdings bear a

significant cost (Al-najjar, 2013). The cash can be seen as idle money that originated from loans or issue of shares in which are not free of charge. In addition, holding a certain amount of cash hindered investment in a project or market expansion. This also has an opportunity cost. On the other hand, cash shortage can lead to unexpected situations and affect the companies' reputation. Companies retain cash to ensure that they have enough money to pay operational costs and even invest in prospective projects.

Research in cash holding is actually not a new field in finance and accounting literature. In fact, cash holding has attracted accounting and finance scholars since the 1930s (see for example Keynes, 1936, Miller and Orr, 1996). However, research on cash holding in the public sector especially in government institution is scanty (Gore, 2009). The motivation and pattern of holding cash in governments can be different from the motivation of the management in private sector. For example, local government officials attempt to minimize cash holding and spend cash effectively for the sake of their citizen (Gore, 2009). Thus, the ideal amount of cash holding in governments and the motivation behind cash holdings need to be investigated to increase quality of government financial management. Instead of having too much cash, governments can use the money to finance other projects and in turn create more value for their citizens.

According to Williams (2004), most of the government stakeholders do not fully concern on government cash management. The reason could be that the implication of poor cash management on government financial condition might not be greater than the debt mismanagement (Williams, 2004). In term of cash holding and cash management in the public sector, research on their determinants is very limited (Abdullah & Muthia, 2017).

Gore (2009) investigated the determinants of municipal cash holdings in the US between 1997 and 2003. She unveils that the higher cash holdings are found in the US local governments which have higher revenue stream variation. She also found that big size municipalities and municipalities which have received more transfer funds tend to maintain high amount of cash at the end of period.

The motivation of cash holding in government could be similar to cash holding practice in private sectors. It is a part of cash management with aims to provide timely money to pay the government's expenditures, to avoid to substantial idle money, to attain better results and to reduce extra capital costs (Mu, 2006). The incentive of accumulating cash can be associated with agency problems i.e. higher cash holding municipalities tend to pay more administrative, salaries and bonuses (Gore, 2009).

In the context of a developing country, Indonesia, cash holding in local governments is regulated in PSAP No.01 (*Pernyataan Standar Akuntansi Pemerintahan*/ Statement of Government Accounting Standard). In this context, the year ended cash balance refers to cash on hand and cash on bank that can be used for a whole year to finance program and pay government liabilities. The Indonesian central government has concern more on cash management since the last decades with the tagline from cash administration to cash management (Indonesian Ministry of Finance, 2014). In this case, some Indonesian local governments are under scrutiny as they have a very large amount of cash balance at the end of the year (Indonesian Ministry of Finance, 2014).

The purpose of this study is to investigate the relationship between local government size, budget revision, beginning cash balance, current budget absorption and regional fiscal capacity and cash holding in local governments of Aceh Province –

Indonesia. Different from previous studies, this study focuses only in local governments within Aceh Province as this province has received a significant transfer fund i.e. Special Autonomy Fund since 2008.

Previous studies in cash holding in government institutions have been conducted in developed countries, whereas this study is undertaken in developing country which has a different setting and regulation. This study contributes to the understanding of dynamic and pattern of cash holding in local governments. This study was undertaken in districts/cities in Aceh provinces whose budgets have risen significantly for the last decades. Thus, a clearer picture, vibrant and trend of cash holding is anticipated. The results can be used as the preliminary findings and as a basis for further research in cash management of Indonesian local governments.

This study found that the amount of cash holding in the local governments show an increasing trend but the number is still ideal (between 3 – 7% of total budgets). It is also unveiled that the strongest association is found between the beginning cash balance and the cash holding. Thus, it indicates that the cash holding is mostly accumulative cash in the local governments.

The structure of this paper consists of 6 parts. The first part is introduction which provides the aim of the research and a brief discussion on cash holding practice in Indonesian local governments. The second part is theoretical framework where cash management concept, definition of variables and previous research findings are presented and discussed. The third part is research method. In this part, research design and data are explained and justified. The next part, the result and discussions, exhibits the result of descriptive and inferential statistical analysis of this study. Later on, this paper is ended with the conclusion part and implication parts in which proposed recommendation is formulated and discussed.

2. THEORETICAL FRAMEWORK

2.1. Cash Management and Cash Holding in Local Government

According to Williams (2004), cash management can be defined as the strategy and related mechanism for handling effectively the government's short-term cash flows and cash balances, both within government and between government and other sectors.

“There is no single definition of international best practice in cash management; but there is an understanding of the key elements. Of course, there are differences between individual countries' legal frameworks, constitutional arrangements and administrative practices. A credible and well-designed reform process must take these differences into account” (Williams, 2004:1)

The purpose of cash management is to reduce unproductive cash and to ensure that the government has ability to pay planned expenditures and to meet cash demand resulted from unexpected circumstance. One of the ultimate cash management output is cash holding. Cash holding is cash in hand or available to be invested in physical assets and distributed to investors (Gill & Shah, 2012). The cash holding is also can be used to ensure successful daily operations of an organization or company, as well as covering the suddenly needed cash needs.

Mu (2006) classified three functional building blocks of an effective government cash management system. Firstly, government cash receipt and disbursement management function. This function deals with how government manages cash flow

to avoid unpaid bills and to reduce too much idle money. Secondly, government cash flow function. This second function deals with the capacity of government to perform forecasting of day to day cash inflow and outflow and ending cash balances. Thirdly, government cash balance management function. This last function is associated with liquidity management and the cost of having cash on hand.

At least, there are three reasons why organizations including local governments hold a certain amount of cash (Ramirez, 2011), namely transaction purposes, precautionary and speculation. The government keeps cash balance to finance routine operational activities. Having cash is cheaper than other assets' deployment. Cash is also maintained by organizations to anticipate unforeseen fluctuation in income. Lastly, an organization holds cash to be used for financing investing opportunities that appears within a short period of time.

An ideal amount of cash holding in local governments could be difficult to be determined. According to Standard & Poor's (1999), governments should maintain a cash balance of 5-10% of operating expenditures or more than monthly cash required (as cited in Gore, 2009). Meanwhile, the Government Finance Officers Association suggests an ideal cash reserve that equal to 16 per cent of estimated revenues (as cited in Hand et al, 2015).

Previous studies on cash holding in governments are still very limited. (Gore, 2009) investigates the determinants of the US municipal cash holdings and the consequences of high level of cash holding. She found that high level cash holding are found in municipalities with unstable revenues, limited revenue sources and higher growth. She also documented that larger municipalities are most likely have more cash holding. The high level cash holding tend to spend more on administrative expenditures, manager salaries and bonuses. This study is replicated by Hand et al. (2015) with the same objective. Hand et al. (2015) increases the robustness of the data by using 400,000 city years observation compared to the Gore (2009) which gathered 9,413 observations. They found similar results that municipalities hold high level of cash reserve. In Indonesia context, Abdullah & Muthia (2017) have examined the determinants of cash holding in Aceh local governments. The uncovers that cash holdings in the local governments are positively influenced by government size and previous year cash balance and negatively affected by the budget absorption.

This study uses a non-parametric test, more observation, and more variables to analysis variables that potentially associated with cash holdings in Aceh local governments. Unlike Abdullah & Muthia (2017), this study examine the correlation of the government size, budget revision, cash balance, budget absorption and fiscal capacity with cash holding.

2.2. Government size

There are many things that support the idea that the size of an organization significantly affects the organizational structure. Large organizations tend to have more rules and regulations compared to small organizations. Provinces, districts or cities with greater total assets will be more complex in maintaining and managing their assets (Waliyyani & Mahmud, 2015). The larger government size, the higher cash they receive, in turn, the higher the potential unused cash they have. This preposition has been confirmed by Gore (2009) and Hand, Pierson, & Thomson, (2015) in their studies on the US municipalities.

In the context of companies, managers have incentives to hold a certain amount of cash to anticipate dividend payments and to cover the financing of potential project

proposals. The bigger are the companies, the higher are the cash holding. However, in the context of local governments, higher amount of cash holding cannot be associated with the dividends or project opportunities as the budget is very rigid, in turn, the manager of local governments, especially in Indonesia, cannot use the end balance of cash directly and freely unless the current budget has been approved.

Ha1: Local government size is correlated with cash holdings in local governments of Aceh Provinces.

2.3. Budget Revision

The budget revision is a common practice in Indonesian local governments. The revision local government budget (or APBD) is undertaken if there is a development that is not in accordance with the current general policy. The other cause is the circumstances that cause budget shifts among organizational units, activities, types of expenditures as well as the circumstances that led to budget balance over the previous year should be used financing in the current budget year.

In practice, there are frequent budget shifts between organizational units, between activities and between types of expenditure. The shifting between objects of expenditure and inter-detail of objects of expense must be all formulated in DPPA-SKPD (Document of Implementation of Amendments to Budgets of Regional Work Unit) with the approval of PPKD (the Regional Finance Manager). These can also cause budget revision.

Changes in budgets, either in the form of additions and/or reductions due to the budget shifts mentioned above, should be explained in the explanatory column on the translation of the APBD changes. Once the regional budget is set, during the execution of the budget during the current fiscal year there is likely to be a difference between the planned and the planned budget amount. This may require adjustment or revision in the fiscal year, Forrester & Mullins (in Kusyanti, et al 2014).

The budget changes are made so that between the target and the allocation have been in accordance with the latest developments in the field, for example due to changes in assumptions that affect the revenue and expenditure estimates (Abdullah & Rona, 2015). With the changes of the APBD, local government hopes that the on-going program can achieve its performance as it was previously set (Asmara, 2010).

The budget revision can result in excess of cash holding. The reason could be that the governments do not have sufficient time to execute new budgeted programs. Thus, it would increase the ending cash balance. On the contrary, an effective budget revision can lead to an optimal budget spending, and thus, it decreases the ending balance of cash at the end of the year.

Ha2: Budget revision is correlated with cash holdings in local governments of Aceh Provinces.

2.4. Beginning cash balance

The previous year's budget is an important source of financing for local governments, especially at the beginning of the current financial year. According to the Indonesian accounting government standard, cash is referred to money on hand or in bank that can be used directly by governments. The beginning cash balance can provide ample opportunity for the government to finance daily operation at the beginning of the year. However, in local governments, the cash balance cannot be used

before the budget is approved. As a result, the beginning cash balance is accumulated and thus it increases the end cash balance.

Ha3: Beginning cash balance is correlated with cash holdings in local governments of Aceh Provinces.

2.5. Budget absorption

At the end of the year, budget absorption, in general, can be very high, whereas at the beginning period of the year the budget is difficult to realize as expected by the public, not even a few institutions whose budget absorption is still less until middle of the year (Sinaga, 2016). There are several factors that cause low budget absorption problem, namely:

- a. Excessive fear from government officers in the budget usage.
- b. a weak planning and evaluation system
- c. Government officers in various institutions have a lack of understanding of the mechanisms of budget use and the model of accountability.
- d. The delay in determining the budget

The causes of low budget absorption could be that most infrastructure construction program both procurement of goods and services (construction), are still in the process of completion. Administratively, these activities have absorbed the budget (Simamora, 2014). The level of budget absorption can affect the cash holding in government. The budget absorption in Indonesia has a unique pattern. According to Adrison & Flukeria, 2016, the budget absorption in local governments are not equally distributed over the years. Generally, more than 50% public spending is executed in the third quarter, whereas the lowest level of budget absorption is in the first quarter of the year (Adrison & Flukeria, 2016).

The pattern of budget absorption can determine cash balance at the end of period. If the governments failed to realize the entire spending budget, it will lead to higher amount of cash holding at the end of the year.

Ha4: Budget absorption is correlated with cash holdings in local governments of Aceh Provinces.

2.6. Regional Fiscal Capacity

Each region is equipped with financial capacity to carry out its functions and authorities (Simanjuntak, 2003). With the implementation of the regional autonomy law, regional authority has gained a broader autonomy and budget (Sriyana, 2009). The regional fiscal capacity is the ability of local governments to collect revenues based on their sources. The regional fiscal capacity is a source of funding derived from local revenue (PAD) and revenue-sharing. In the implementation of regional autonomy, the role of PAD in regional finance becomes one of the important benchmarks. Thus it can be interpreted that the greater the area obtaining and collecting the PAD, the more there is also a substantial amount of regional finance that can be used to finance the delivery of regional autonomy (Rahman, et al., 2014).

Ha5: Regional Fiscal Capacity is correlated with cash holdings in local governments of Aceh Provinces.

3. RESEARCH METHOD

This study is a quantitative research to examine the association between local government size, budget revision, beginning cash balance, current budget absorption

and regional fiscal capacity and cash holding in local governments of Aceh Province – Indonesia. This study was carried out in 23 districts/cities in Aceh. Data is gathered from LKPD (Local Government Financial Report) and statistic report from the Central Bureau of Statistics (BPS) from 2011 to 2015. The population in this study is 23 districts / cities in Aceh. The amount of observation data in this research for 5 years is 114 years-local governments. One observation is deleted as it has negative cash holding.

1. The Size of Local Government

The size of the organization shows how big an organization is (Setyaningrum & Syafitri, 2012). Areas with larger areas would require more facilities and infrastructure as a condition for public service when compared with areas with a relatively small area. The population can be used as a proxy for the size of local government. The study used population or population as a proxy for the size of Local government. The data of population can be from BPS of Aceh province.

2. The Budget Revisions

APBD changes are possible if there is a development that is not in accordance with the general policy there are circumstances that cause a budget shift between organizational units, between activities, between types of expenditure as well as the circumstances that cause the budget balance over the previous year should be used financing in the current budget year (Putri, 2015). The measurement used is the difference between the regional budget and the realization of regional expenditure.

3. The beginning cash balance

In this study, the beginning cash balance is proxied by SiLPA (*Sisa Lebih Penggunaan Anggaran* or unspent funds at end of fiscal year, carried forward to ensuing year). This fund can be used for continuing programs that not completed or accomplished and to finance new programs whose budget are not yet specified (Abdullah & Muthia, 2017). The SiLPA reflects the ending balance of cash at the end of the year. This data is gathered from the ending balance of the last year cash from the previous year financial position statement.

4. The Budget Absorption

The difference between the budget and its realization shows the budget absorption, which implicitly illustrates the inability of local governments to achieve the development targets to be achieved through budget execution. Measuring absorption requires more than just comparing the available funds and actual expenses. Even if 100% of the allocated budget is spent there may be absorptive constraints that have led to a reallocation of funds or failure to implement the work plan. The proxy rate for this variable is obtained from the realization of the current year's expenditure.

5. The Fiscal Capacity

Regional fiscal capacity depicts the financial capacity of each local government which is reflected by the amount of received general transfer fund and own source

revenues to cover government tasks after deducting employee salaries and divided by the population of poor people. The calculation of fiscal capacity of provincial and regency / municipal regions is based on the following formula (Regulation of Ministry of Finance No. 37, 2016):

$$FC = \frac{OSR + TF + OR - EE}{\text{Poor people population}}$$

FC = Fiscal Capacity
 OSR = Own Source Revenue (or *Pendapatan Asli Daerah*/ PAD)
 GTF = General Transfer Fund from the upper governments
 OR = Other revenues
 EE = Employee Expenditure

To examine the relationship between the variables, the Pearson Correlation test is employed. The statistical formula is able to evaluate the strength of the association between variables. The Pearson correlation coefficient assesses the strength of linear association between two variables (Sedgwick, 2012). The statistic software used in this data analysis is SPSS. The expected results are a range of relationship level between 0 and 1. The higher the correlation value, the tighter the relationship among the variables. If the correlation value $\neq 0$, thus the proposed alternative hypotheses is accepted and vice versa.

Table 1 Interpretation of Correlation coefficient
 Source: Evans (1996)

No	Correlation coefficient	Interpretation
1	0.00 – 0.19	very weak
2	0.20 – 0.39	weak
3	0.40 – 0.59	moderate
4	0.60 – 0.79	strong
5	0.80 – 1.00	very strong

4. RESULTS AND DISCUSSIONS

4.1 Descriptive Analysis

The result of descriptive analysis uncovered a substantial variation and relatively large amount of cash holdings among the studied local governments. The results can be seen from the following table (table 2).

Table 2 Statistic descriptive results
 Source: data analysis results (2018)

No	Variables	Mean	Minimum (Maximum)	Std. Deviation
1	Cash holding (Y)	46,762,964,328	96,950,207 (223,707,384,057)	42,740,993,565
2	Government size (X1)	209,557	31,335 (583,892)	132,191
3	Budget revision (X2)	88,929,034,549	11,972,386,832 (1,405,710,268,805)	145,099,636,403
4	Beginning cash balance (X3)	35,660,101,325	96,950,207 (148,292,987,449)	34,161,173,963
5	Budget absorption (X4)	759,645,154,053	306,284,108,970 (2,017,919,014,013)	336,906,541,335
6	Fiscal capacity (X5)	1,259,464,205	794,608 (22,155,584,443)	3,114,590,082
Number of observations 114 years-local governments				

Based on table 2, it can be clearly seen that the amount of cash holdings in the local governments are varied significantly. The average value of cash holding is IDR. 46,600,790,781. The standard deviation is IDR. 42,588,643,614. In addition, the minimum amount of the cash holding is IDR 96,950,207, whereas the highest is IDR. 223,707,384,057. Thus, each local government seems to have its own policy and target of cash holding at the end of the year.

Table 3 Trend of cash holdings in local governments in Aceh
Source: data analysis results (2018)

No	Items (in billion IDR)	2011	2012	2013	2014	2015
1	Average value	17.33	26.00	51.27	69.57	72.87
2	Maximum value	61.36	66.86	134.12	148.29	223.71
3	Minimum value	1.61	0.10	1.27	11.21	1.13

Furthermore, the table 3 exhibits the trend of cash holding between 2011 and 2015 in Aceh local governments. It can be clearly seen that the cash holding increase over the years from 17.33 billion IDR in 2011 to 72.87 billion IDR in 2015. This reflects that the local governments' motivation to hold more cash at the end of years. In addition, this study uncovers that some local governments in Aceh provinces have a relatively very small cash holdings (less than 2 billion IDR), whereas the other have more than 61 billion IDR. The difference rises significantly between 2011 and 2015.

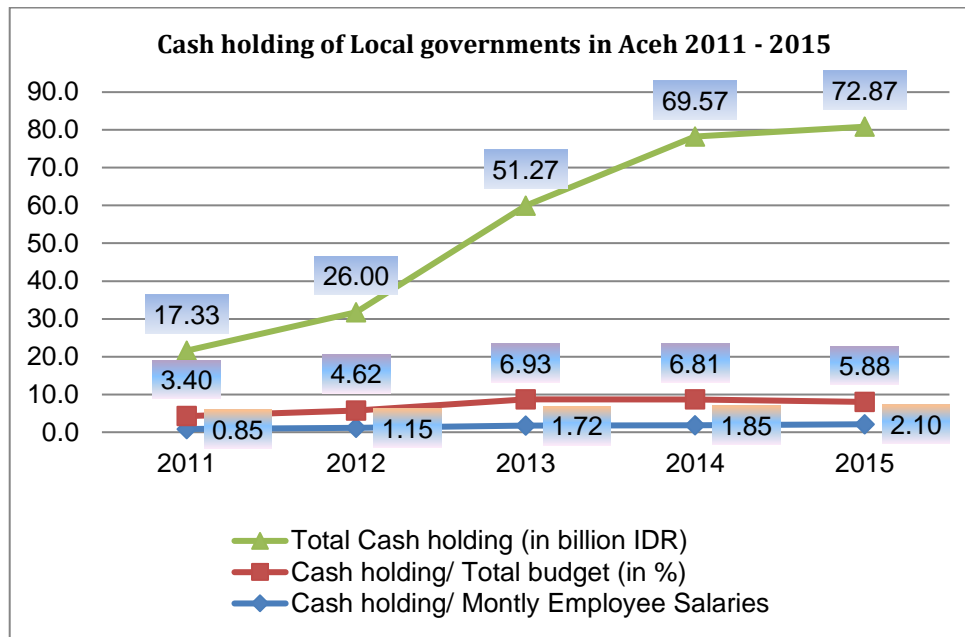


Figure 1. Cash holding in local governments of Aceh Province
Source: data analysis results (2018)

To evaluate the cash holding, a further analysis is performed by comparing the cash holding with the total budget and the monthly salary expenses. It is documented that, in general, the amount of cash holding is 3.4% of the total budget and 0.85 times of monthly employee salaries. These percentages increase gradually to 5.88% and 2.1 times respectively in 2015. On the other words, the increase of cash holdings in the studied local governments is higher than the increase of the total budgets and monthly employee salaries over the years.

Standard & Poor's (1999) as cited in Gore (2009) proposes in ideal rate of 5-10% of cash holding from the total expenditures. Meanwhile, the Government Finance Officers Association suggests an ideal cash reserve that equal to 16 per cent of estimated revenues (as cited in Hand et al, 2015). Therefore, according to the figure 1, the local governments in Aceh province have an ideal amount of cash holdings because in average, the cash holding is around 5% every year.

4.2. Correlation test results

The correlation test demonstrates that the proposed variables have either a positive or a negative correlation with the cash holding. Firstly, government size has a significant positive association with cash holding as the value of Pearson coefficient is 0.323. Secondly, budget revision has also positive correlation with cash holding as its value of the Pearson coefficient is 0.239. The beginning cash balance and budget absorption demonstrate a strongest positive and significant correlation with cash holding. Meanwhile, a negative association is found between the fiscal capacity of the studied local government and their cash holdings. Based on these results, all proposed alternative hypotheses are accepted.

Table 4: Results of correlation test
Source: data analysis results (2017)

No	Variables	Cash holding (Y)	Level of Significance
1	Government size (X1)	0.323	0.000
2	Budget revision (X2)	0.239	0.010
3	Beginning cash balance (X3)	0.752	0.000
4	Budget absorption (X4)	0.520	0.000
5	Fiscal capacity (X5)	-0.165	0.080
Number of observations 114 years-local governments			

The relationship between beginning cash balance and cash holding shows the strongest correlation i.e. 0.752 (strong correlation). This means that local governments with higher beginning cash balances tend to have higher ending cash balances (cash holdings). This might indicate that the beginning cash balance is accumulative and the local governments do not have an optimal mechanism of cash management. The cash has accumulated over the years and the local government seems does have enough concern or strategy to reduce the unproductive money.

The budget absorption also has a positive association with cash holding with correlation coefficient is 0.520 (moderate correlation). This means that local governments with high budget absorption are most likely would have higher cash holding. This might indicate that the executed or implemented program and projects create a positive cash inflow to the local governments. In the other words, the local governments spend less than the budget. These programs are either carried out efficiently or the program budgets are overestimated. Further studies are required to explore the reason behinds.

Furthermore, the government size and budget revision have a similar correlation value, namely 0.323 and 0.239 respectively. These numbers demonstrate a weak correlation with the cash holdings. Thus, this study is not consistent with previous cash holding studies in private organization where the size of organization has positive association with cash holding and do not support the result of Gore (2009) and (Hand et al., 2015) studies.

Lastly, this study also documents a weak negative association between fiscal capacity and cash holding is demonstrated in this study. It means that local governments with high fiscal capacity tend to have fewer cash holdings. Finally, this study provides empirical evidence on cash holdings of local governments in Aceh Province and their trends. It can help in formulating policy on excessive cash holding in local governments in order to avoid unproductive money and increase the quality of government financial management.

5. CONCLUSION

The aim of this study is to investigate the relationship between local government size, budget revision, beginning cash balance, current budget absorption and regional fiscal capacity and cash holding in local governments of Aceh Province –

Indonesia. This study concludes that the beginning cash balance, current budget absorption, budget revision, local government size have a positive association with cash holding, while the fiscal capacity has a negative relationship with cash holding in the studied districts and cities within Aceh Province – Indonesia.

Table 5: Results of correlation test
Source: Summary of the results (2017)

No	Variables	Direction	Level of Correlation
1	Government size (X1)	Positive	Weak
2	Budget revision (X2)	Positive	Weak
3	Beginning cash balance (X3)	Positive	Strong
4	Budget absorption (X4)	Positive	Moderate
5	Fiscal capacity (X5)	Negative	Very weak
Number of observations 114 years-local governments			

The correlation level is varied from strong to weak correlation. The government size has a weak positive correlation with cash holding. Similarly, budget revision has a weak positive association with the cash holding in the local governments. A strong correlation is demonstrated by the beginning cash with positive direction. The budget absorption is correlate positively moderate with the cash holding in the local governments. Lastly, a negative correlation is found in the association between fiscal capacity and cash holding.

Thus, it can be concluded that cash holding in the local governments of Aceh provinces is mainly associated with the accumulated cash holding over the years. Thus, the motivation of business strategy or finance operational expenses might not be the real reasons behind.

6. IMPLICATION AND LIMITATIONS

This study found that the amount of cash holding in the local governments show an increasing trend. The local governments and ministry of finance should provide a regulation on how much money should ideally left at the end of the period. Too much money should be avoided as in Indonesian financial system, the ending cash balance cannot be used unless the current year budget has been approved. As a result, idle money in the beginning period is inevitable and unproductive.

Based on this study, the local governments need to focus on how the use and anticipate the beginning of cash balance. As this study found a strong relationship between the beginnings of cash balance on the cash holding, the local governments should have a specific plan for such idle money, otherwise it will accumulated. Moreover, the budget absorption should be anticipated by proposing alternative programs to overcome the remaining cash resulted by low level budget absorption. These initiatives should be considered and planned by the local governments in order to enhance the effectiveness of cash management.

The limitation of this study is the scope of research i.e. only districts/cities in Aceh Province. As a result, the generalization level is very limited. Another drawback

is the data analysis in which a correlation test is employed. Consequently, this study cannot justify any causal relationship between the variables. Thus, it is imperative to conduct causal relationship based study to define the determinants of the cash holding in Indonesian local government. However, a more crucial topic need to investigate is why and how the cash holding in local governments used by the managers and whether there is agency problem behind. This can be done by conducting qualitative based research in some local governments with relatively high ending cash balance.

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