Proceedings of the Australasian Conference on Business and Social Sciences 2015, Sydney
(in partnership with The Journal of Developing Areas)
ISBN 978-0-9925622-1-2

INDONESIA'S LOCAL GOVERNMENT IN RISK: A STUDY ON POST-DECENTRALIZED LOCAL GOVERNMENT FINANCE

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ABSTRACT

Whilst decentralization brought improvements to Indonesia's public sector, there has been repeated attention to the flaws and risks in local government financial management. Local government faces increasing risk exposure that may distract efforts in achieving the service delivery objectives, and this includes the impacts of corruption. This paper reports on a study that examines risks that influence the achievement of local government financial objectives in Indonesia. According to a cross-country survey and case studies in three local governments, the study finds that some risks, such as financial and fraud risks, human resource weaknesses, and regulation and policy changes, are significant in affecting the objective achievement of Indonesian local government finance. Identifying the nature of risk, and its significance, should assist in understanding and solving problems in post-decentralized local government finance.

JEL Classification: H71, H72, H77, H89
Keywords: Decentralization, risk, local government finance
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INTRODUCTION

It has been repeatedly argued that Indonesia's public sector has transformed from being the most 'centralized in the world into the most decentralized' (Shah, Qibthiyyah and Dita, 2012; Smoke and Lewis,1996; Lewis and Oosterman, 2010). Lewis and Oosterman (2010) write that Indonesia's public sector transformation was cemented in 1999 with the passing of two interrelated laws; a law with a focus on administration (Law 22/99) and another on fiscal and finance issues (Law 25/99). They note: "In December 2000, Law 34/00, an additional and essential piece of decentralization legislation on subnational government taxation, was passed by the national parliament (DPR). In late 2004, Indonesia initiated a redesign of its basic decentralization framework by issuing revisions to two major pieces of legislation, Law 32/04 on administration and Law 33/04 on fiscal matters". (2010, p.151).

Each of Indonesia's autonomous regions has its own leader and legislative body elected by popular vote for a 5-year term. Since the enactment of decentralization laws, these bodies now play a greater role in administering their areas which includes financial management. Local government is required to develop new systems for the provision of services. This has resulted in the development of educational, human resources, health service and financial management systems. These can be inherently complicated systems that need extensive resourcing and effective technologies. The changing of local government's financial systems and this inherent complexity, together with the problems/weaknesses that appear in post-decentralized local government finance, all can coalesce to increase uncertainty in achieving local government objectives. Local government faces risks, since risk is associated with uncertainty and complexity (Chan, Takahasi and Wang, 2010). Identifying and understanding the risks that appear in local government finance is important as a part of problem solving and assisting local government achieve its functions and objectives. However risk and risk management in Indonesia local government is a new area, and there is a paucity of research on these matters.

Against this backdrop, the objective of this paper is to discuss the risks that emerge in Indonesia's post-decentralized local government financial systems. The paper is presented in three sections. The first section discusses the processes of decentralization in Indonesia as it moved from the old to the new laws, and the scope of post-decentralized local government finance. Secondly, the paper explores the risks that appear in Indonesian local government finance based on research conducted by the author using a survey and case studies. Finally, the paper concludes with discussion about risks in context of a post–decentralized local government financial systems.

POST-DECENTRALIZED LOCAL GOVERNMENT IN INDONESIA

Although the current decentralization signified a milestone in reform of Indonesia's public governance, studies about decentralization in Indonesia preceded this current decentralization period. The discussion below is organized into three sub-sections, decentralization under Law Number 5/1974, decentralization under Law number 22/1999 and 25/1999 and scopes of post-decentralized local government finance. This material provides important context for any discussion of risk in local government financial systems in Indonesia.

Decentralization under Law Number 5/1974

Decentralization policies have been a feature of Indonesia's system for many years. Smoke and Lewis (1996) explored decentralization in examination of an historic Law Number 5 year 1974 regarding basic principles of government at the regional level. According to Smoke and Lewis (1996, p.1282), local infrastructure services in Indonesia were "*developed and operated in a multi-tiered and complex system*" of regional administration and regional government. Authority in raising revenue and providing services were assigned to central government agencies, but certain functions were the responsibility of local government to deliver. In this era of decentralization, according to Smoke and Lewis, local government, as an administrative subsidiary of the central government and semi-autonomous entity, was expected to be a partner of central government ministries and their representative offices in planning and executing development projects and providing services (Smoke and Lewis, 1996). Beier and Ferrazzi notes that the interrelation between local government and central government agencies were arranged based on three principles of governance "(decentralization (devolution), de-concentration, and co-administration)" as enacted by law 5/1974. However, it was the de-concentration mechanism that was extensively used, with most departments extending representative offices down to the local government jurisdiction (Beier & Ferrazi, 1998).

Smoke and Lewis (1996) also propose that there was no clear division of service functions among levels of government in Indonesia during this era of decentralization. Many type of services in local government involved higher levels of government in planning, design, financing and delivering. Although local services, such as urban water supplies, solid waste management and local road development, were the responsibility of a local government, the involvement of central government ministries and their representative office was the typical arrangement in this era. This situation is understandable since the central government had typically financed at least 70% of total regional government expenditures with intergovernmental grants, often with another 10-15% coming from shared central revenue sources. Still according to Smoke and Lewis, in this period, decentralization was conducted by program initiatives undertaken by various ministries such as Integrated Urban Infrastructure Development Program (Smoke & Lewis, 1996). According to the studies above, there is a clear proposition that the Indonesia decentralization was initiated by central government agencies guided by general features in Law 5/1974.

Decentralization under Law 22/1999 and 25/1999

As stated earlier, with the implementation of Law 22/1999 and 25/1999 in 2001, Indonesia has been transformed into a highly decentralized developing country (Shah, et. al., 2012). In administrative matters, Lewis (2005, p.292) states that the recent legislation "eliminated the de-concentrated agencies of central government. In addition, the hierarchical relationship between provincial and local governments was abolished". The new laws also enabled elections of governors (of provinces) and regent/major (of regency/city) (Lewis, 2005).

Relating to taxation, Lewis (2005) notes that major tax bases are still under the authority of central government. Lewis also reveals that local government's rights in creating new revenue bases (taxes and charges) are not dissimilar to the previous period. As he writes tax bases are prescribed centrally with some local government authority to set rates, although below ceilings set by the central government. What is new in the current decentralization era, according to Lewis, is that local governments are now allowed "to create their own taxes and charges through local regulation within central government guidelines and approval" (Lewis, 2005).

Lewis (2005) also notes the changes and restructure in intergovernmental transfer/grants (2005, p. 141) and there is a different access to revenue from natural resources and taxes. Based on the new arrangements, local governments where natural resources are produced obtain more revenue transfer from central government. For example, in 2002 almost 75% of total natural resource transfer revenue was distributed to provinces of Aceh, Riau, East Kalimantan and Papua and the local governments contained therein. The provinces are renowned as areas with oil and natural gas reserves. Furthermore, according to Lewis, the current decentralization introduces new intergovernmental grant mechanisms. Central government uses the General Purpose Fund and the Special Purpose Fund replacing the old ones, Autonomous Region Subsides and Presidential Instruction Grants (Lewis, 2005).

ISBN 978-0-9925622-1-2

Local Government Finance in Post-decentralized Indonesia

As the above discussion outlines, decentralization in Indonesia conveys a new era in local governance finance. There have been new provisions in regulation regarding financial matters, such as local revenues, expenditure and central-local financial relation and these have widened the scope of local government authority in managing its own finance. This section will discuss more the parameters of local government finance and challenges in the context of decentralization in Indonesia.

Local government finance is a vast area of discussion and is an aspect of all operation of a local government. Local government agencies cannot deliver their services without financial resources. Local government offices cannot conduct procurements of goods or services without financial supporting. These examples demonstrate the importance of financial matters relating to local government activities.

According to Ministry of Internal Affairs (MoIA) Regulation Number 13/2006 and its revision Number 59/2007, the scope of local government finance covers:

1. Local government's authorities in local taxation, retributions and debts
2. Responsibilities in conducting local government affairs and paying liabilities
3. Cash receipt
4. Cash disbursement
5. Local government's assets that are managed by itself or third parties, including cash, securities, receivables, goods and other rights, and local government-owned companies.
6. Third party assets that are occupied by local government in order to fulfill its official duties and/or public needs (MoIA Regulation Number 13/2006).

The first two points above indicate local government's rights to raise revenues and manage expenditure, in order to deliver public services. Local government revenue, according to Ministry of Internal Affairs regulation, consists of:

1. Own-source revenue that is generated from local tax, user charges, profit shared from local government-owned company and other own-source revenue.
2. Central government transfers include general purpose transfer/DAU and special allocation grant/DAK.
3. Shared revenues from natural resources.
4. Other revenues, such as donation, emergency fund from central government, shared-regional tax from province, adjustment fund and supporting fund from province or other local government (MoIA Regulation Number 13/2006).

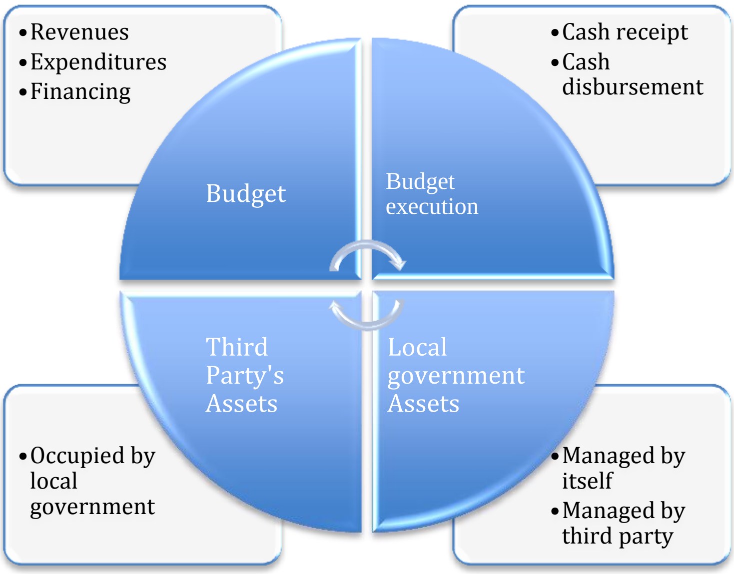
Though local government's own revenues are fully controlled by local government, they do not contribute significantly to local government revenue (Siddiquee, Nastiti, and Sejati, 2012) and in 2010 represented approximately 16% of total local government's revenues (ADB, 2012). In other words, central government's transfer (general purpose transfer and special allocation grant) still form the largest part of local government's revenues. As well, in some regions, natural resources shared revenue (indeed another form of central government's transfer) is the largest part of local government revenue, and again local-owned revenues take an insignificant portion. For example, according to 2014 its annual budget figures, Kutai Kartanegara Regency would receive shared revenue from central government of about IDR 4,006 billion, which means 76.64% of its total estimated revenue (www.depkeu.go.id).

According to Ministry of Internal Affairs Regulation Number 13/2006, expenditures are classified into two main categories, indirect and direct expenditures. Indirect expenditures do not have direct relation with execution of programs and activities, but are needed in delivering public services, such as salary, interest, donation, subsidies, social support, financial assistance and extraordinary expenditure. Direct expenditures relate and can be traced with their programs or activities. The expenditures are classified into three types that labour, goods/services and fixed asset/capital expenditures.

Rarely is the amount of budgeted revenues and expenditures in a balanced state. Surplus or deficit always occur in local government budgeting and its execution. In his study, Lewis (2008) defined local government surplus/deficit "as the increase/decrease in reserve funds from one year to the next". He found that during 2001-2006, "*regional government reserves expanded from approximately IDR 7 trillion to about IDR 70 trillion or grew at annual rate of 45% during the specified period*" (Lewis 2008, pp 2). Furthermore, according to Ministry of Internal Affairs (MoIA) Regulation Number 13/2006, local government has authority to deal with the deficit by utilizing some sources of funding. The surplus can be disbursed to repay local government's debt, investment in local government owned company, lending to central government or other local government, and funding social safety programs.

After budget setting that involves revenues, expenditures and financing, local government executes the budget. Cash receipt and disbursement are a form of budget execution. Local government receives cash from taxes, service charge and other revenue. Then, local government disburses cash in order to conduct governmental affairs and to deliver services. Furthermore, local government finance also includes local government assets management that covers activities in acquisition, utilization, recording, maintenance and disposal of assets. The scope of local government finance can be summarized in Figure 1 below:

FIGURE 1. THE SCOPE OF LOCAL GOVENRMENT FINANCE



Source: Ministry of Internal Affair Regulation Number 13/2006

As argued earlier in this paper, the changes to local government's authority and responsibility under the current decentralization have increased complexity in financial matters. General Purpose Transfer (GPT) from the central government is a good example of this complexity which can result in lack of transparency, inequity and uncertainty in allocation (Shah, et.al., 2012). Shah et al state that GPT involving expenditure need determination uses a one size fits all approach and assumes per capita fiscal needs of large cities are similar to those of small town or rural district. However this creates injustice for large urban and large rural areas. Furthermore, Shah and colleagues make the comment that a gap filling approach, used in GPT calculation is:

> *"..unnecessarily complex, non-transparent and uses a macro approach that is not well grounded in the local realities to ensure inter-jurisdictional equity. These transfers also create an incentive and accountability structure that is not conducive to responsible, responsive, fair and accountable local governance" (Shah, et.al., 2012, pp.11).*

Based on the above discussion, we may note some important points. The processes that are operating in Indonesia are obviously not pure decentralization. Though local governments have enough autonomy in disbursing its money in order to deliver services, their revenue is highly dependent on central government grants. The legislation does not award local governments enough authority and freedom to create revenue bases in order to fulfil their own needs. Indeed, whilst there are some improvement enabled by the new decentralization in Indonesia, there is a repeat of conditions that were evident under the old decentralization under Law number 5/1974.

However, this kind of decentralization may be suitable given the Indonesian context. Indonesian development policies have concentrated on centres of growth which were expected to spread economic growth to their surrounding areas through a 'trickle-down-effect' (Pribadi, Putra and Rustiadi, 2014). Unfortunately, Anwar (2005) notes, as cited by Pribadi, Putra and Rustiadi, that Indonesia experiences increasing regional disparities between Java and outside Java, between urban and rural areas and between the east and west of Indonesia. Indonesia also has relatively severe provincial income per capita disparity (Resosudarmo and Vidyattama, 2006). In the local government finance context, there is a wide gap across the local revenues of local governments. For example, according to 2014 budget data, Surabaya City (a big, Java and west of Indonesian city) would receive local revenues amount to IDR 2,953,981 million which equates to 50,83% of its total revenues. On the other side, Pegunungan Arfak Regency (a new, outside Java and east of Indonesia regency) would receive local revenues amount to only IDR 20 million and this equates to 0.01% of its total revenues (www.depkeu.go.id). Therefore, current central government roles in revenue allocation for local governments might be suitable in diminishing gap among local governments and responding to issues of equity. However this claim needs further exploration.

ISBN 978-0-9925622-1-2

THE RISKS IN POST-DECENTRALIZED LOCAL GOVERNMENT FINANCE

The process of decentralization as mentioned in the previous section, has been marked by weaknesses and problems that can be seen as distractions for local governments in achieving their objectives. Some studies explore and identify challenging findings such as the following, more particularly the work of Lewis (2008) and Lewis and Oosterman (2009).

One challenge is that the accumulation of significant idle funds reached approximately 3% of GDP from unmatched budget during 2001-2006 (Lewis, 2008). As Lewis and Oosterman suggest, this was caused by increase in central government transfers and underestimating of shared natural resources revenues, accompanied by overestimating of spending (Lewis and Oosterman, 2009). Furthermore, Lewis proposes that the idle fund reflects unfulfilled programs or activities and may affect the capacity of local government to deliver their services and fulfil public needs in order to satisfying the constituents. However, other aspects are also important such as actual quality of services, budget transparency and trust (Lewis, 2010).

Furthermore, there are substantial weaknesses in accounting and reporting, as components of accountability in local government finance. For the fiscal year 2013, BPK (The Audit Board of The Republic of Indonesia) reported that only 138 of 427 districts/cities' financial statements matched accounting standards or were awarded unqualified opinion (BPK-RI 2014). This means that only 32.32% of all districts/cities were audited for the specified period. The Board indicated weakness related to local government financial accounting and reporting, such as in fixed asset management, cash management, local government's investment, inventory, and capital expenditure or good/service procurement. Furthermore, The Audit Board found cases beyond the accounting and reporting practices, including financial losses and potential losses, revenue shortfall, problems of inefficiency and ineffectiveness. Table 1 below from the BPK shows those cases and their value:

TABLE 1. THE AUDIT BOARD'S FINDINGS

Nature of the Cases	Number of Cases	Value (millions IDR)
Financial Losses	3,096	1,986,872.79
Potential Financial Losses	551	12,115,562.30
Un-received Revenue	1,253	11,637,927.36
Uneconomical	210	1,008,600.08
Inefficiency	6	66,744.83
Ineffectiveness	405	4,061,175,68
Total	5,521	30,876,883.04

Source: First Semester Audit Report for the year of 2014, BPK, 2014, p.20.

Corruption is also a risk. Regional autonomy or decentralization has a downside in triggering corruption across the country. Many writers make the point that corruption, collusion and nepotism have moved to the local level (Hadiz, 2004). This is not only committed by the executive branch but also by legislators. According to Rinaldi, Purnomo and Damayanti (2007), as of 2006, 265 corruption cases that involved 967 local parliament members were identified and handled by 29 District Prosecutor Offices. The Prosecutor Offices also handled 46 corruption cases that committed by 61 regents/majors (Rinaldi, Purnomo, Damayanti, 2007). In addition, during 2004-2011, KPK (Commission for Corruption Eradication) handled 49 corruption cases that involved members of local parliament and 37 cases that involved governors/regents/majors (KPK, 2011). Such findings may represent "the tip of iceberg" for local government financial management flaws.

As mention earlier, decentralization initiated the changing of local government financial system, has increased its complexity, and triggered the problems that appear in post-decentralized local government finance. How can these risks be better identified and managed in the context of local government? It is this broad question that is the focus of a study on risks in Indonesia local government finance which is being undertaken by the author. The research questions are: what are the risks that impact on post-decentralized Indonesia local government achieving financial objectives? How should local government manage the risks? Preliminary research findings are discussed in the next section of the paper.

Methodology

As stated above, the research questions are an exploration of the risks that impact on post-decentralized Indonesian local government achieving financial objectives, and how these risks might best be managed. The concept of risk is defined as:

> *"Effect of uncertainty on objectives. An effect is a deviation from the expected (positive and/or negative). Risk is often expressed in terms of a combination of the consequences of an event and the associated likelihood of occurrence." (ISO 31000:2009).*

According to Purdy, the ISO's definition views risk not only as positive and negative thing but also about the organization's experiences deal with loss and detriment to gain and benefit. Purdy (2010) also notes that risk describes what could happen and how objectives could be influenced (Purdy, 2010).

Survey research

The research has involved both a survey and in depth case studies. The survey in 2014 involved all local governments in Indonesia. According to Ministry of Internal Affairs' data, Indonesia has 508 regencies/cities that consists of 410 regencies and 98 cities. Among those local governments, there are one regency and five cities in Jakarta capital region that are not autonomous but administrative ones. There are 11 regencies that are not yet operational because they were formed recently. Thus the survey involved 491 local governments and two respondents for each local government.

A questionnaire was sent by mail to reach the respondents and included a letter of introduction and return stamped envelope. The response rate to this survey is relatively low. At the end of survey period, 96 respondents (9,78%) sent back the questionnaire. From the responses, 90 respondents (9,16%) answered the questionnaire completely and 6 respondents sent back the blank questionnaires. The 90 respondents come from 65 local governments (13.24%) and 28 provinces (87.50%). Whilst the survey response rate are low, the findings of the study can be considered as "signs" which were explored more deeply in the case study research.

This survey took the form of a questionnaire comprised of 5 sections, with a total of 63 questions, as summarized in Table 2 below:

TABLE 2. STRUCTURE OF QUESTIONNAIRE

Section	**Objective**	**Question**
Section I: Risk Management Practice in Local Government		
Part 1	Examining existence of formal risk management based on ISO 31000:2009 and NSW Framework	20 question
Part 2	Examining factors that prevents the implementation of effective risk management	12 question
Section II: Risk Assessment	Examining practice of risk assessment in local government as a mandatory of Government Regulation number 60/2008	9 questions
Section III: Relationship between risks and objective achievement	Examining risks that influence objectives achievement significantly	3 questions and 62 points for Question 3.
Section IV: Nature of the Risks	Examining areas of consequences that affect objective achievement in local government finance	10 questions
Section V: Risk Sources	Examining internal and external factors that may be the sources of the risks	9 questions

The survey was designed to collect data of respondent's perception about risks that significantly influence objectives in local government finance. This perception was quantified using Likert Scales. Level of objective achievement and risks are based on perception of respondents on these topics. For this purpose, this research study uses the schema of risks that were identified by Widhyantoro in one of local government's agency. Widhyantoro identified 56 risks during his study (Widhyantoro, 2009). Considering the current issues in post-decentralized local government, six risks (reputational risk, legal risk, political changes, terrorism, technology innovations and riots) were added to Widhyantoro's schema to make 62 possible risks.

The results were processed using the Qualitative Response Regression Model (QRRM). This model is used to analyse dependent variables as function of other variables that are qualitative in nature (Gujarati, 2004). The QRRM that is used in this study is the Tobit Model. According to Gujarati (2004), the Tobit Model can be used to examine dependent variables that will be influenced other qualitative variables (explanatory variables), especially socioeconomic in nature. In this research the focus is on risks that significantly influence the objective achievement in local government finance. Statistically, the Tobit Model can be described in the expression below:

Y_i=ß$_1$ + ß$_2$Z$_1$+ ß$_3$Z$_2$ + ß$_4$Z$_3$ +….+ ß$_{n+1}$Z$_n$ +u$_i$
If Right Hand Side (RHS) > 0, otherwise

Y_i = Level of objective achievement in local government finance (Dependent variable)
Z=Level of risks that influence objective achievement (explanatory variable)

The objective in local government finance (dependent variable) are represented by four components as stated in Indonesian Government Regulation number 60/2008. They are efficiency and effectiveness of activities, reliability of financial reporting, safety of assets and compliance to regulations. The independent variables of this model are risks that influence objective achievement significantly.

Furthermore, before undertaking analysis using the Tobit Model, the data that obtained was summarized using Exploratory Factor Analysis (EFA). This step regroups the variables so that relationship and patterns can be easily understood (Yong and Pearce, 2013). Principal Component Analysis (PCA), the EFA that is used in this study, was applied to the 62 risks (dependents variables) using IBM SPSS Version 22. The suitability of data for factor analysis was evaluated before carrying out PCA. The evaluation of the correlation matrix reveals the presence of many coefficients of 0.30 and above. The Kaiser-Meyer-Olkin value was 0.818, exceeding the recommended value of 0.60 (Kaiser, 1970,1974). The result of Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

PCA exposed the existence of eleven components/factors with Eigenvalues more than 1, and they can be candidates of retained factors. The eleven factors totally explain 78.40% of variance of the data. Further, examining the communalities table produced during the PCA, all variables show values more than 0.5, which means the items relatively fit well with the other items in its component (Pallant, 2013). Therefore, this study retains all variables for analysis.

Furthermore, to assist in understanding the components/components, oblique rotation was performed. Based on pattern matrix analysis, this study retains 10 components/factors for next investigating. According to the analysis, the factors, involved risks/variables and risk grouping/classification is presented in table below:

TABLE 3. RISK GROUPING

No. Factor	Involved Variables/Risks	Risk grouping/classification
FACTOR 1	31	Financial and fraud risks
FACTOR 2	8	Tax payer and supplier risks
FACTOR 3	5	External risks
FACTOR 4	4	Other risks
FACTOR 5	3	Shortage of infrastructure risks
FACTOR 6	2	Operational risks
FACTOR 7	2	Strategic risks
FACTOR 8	2	Human resources risks
FACTOR 9	4	Loss of data risks
FACTOR 10	1	Payment risk

The dependent variable (the objective achievement) and the independents variables (the 10 classifications/groups of risks) were then analysed using the Tobit regression in IBM SPSS Version 22.

Case Study

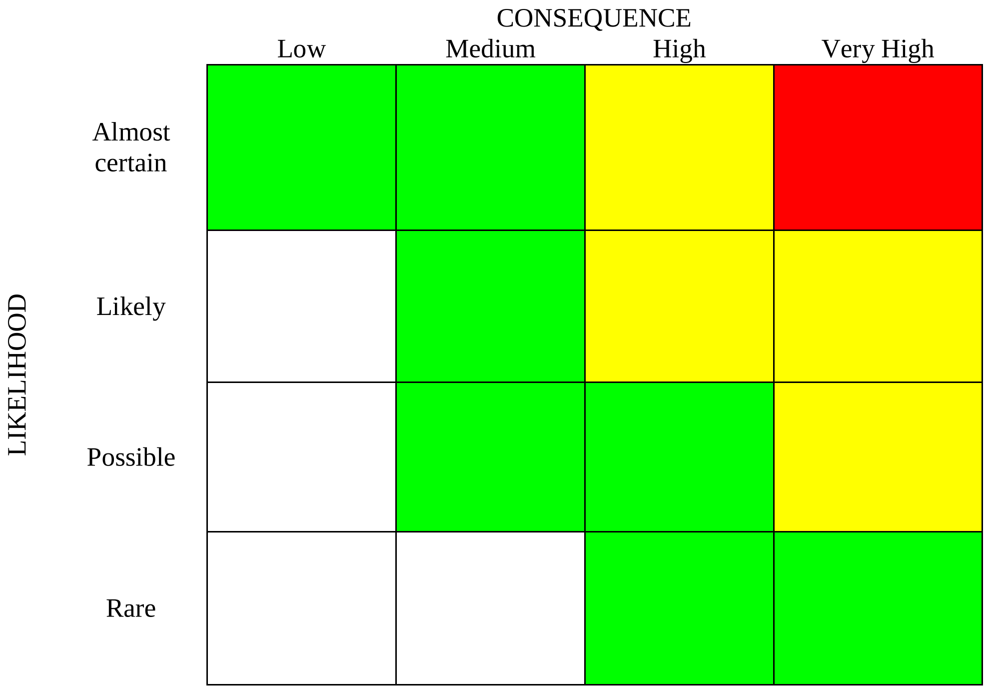
In the second part, the study explored in-depth risks in local government finance through case studies. These took place in three local governments chosen using non-probabilistic purposive sampling. The chosen ones are expected to represent the broad condition of local governments in Indonesia, even though there are clear limitations in doing this. The criteria in choosing the local governments are efficiency (considering cost and time limitation) and effectiveness (considering appropriation of the sample in exploring research questions). Beyond these main considerations, additional criteria were the amount of total revenue in the local government budget, location of the local government (Java and outside Java), and type of local government (regency and city). The chosen local governments consisted of two *kabupaten*/regencies and one *kota/*city, and they are coded as local government 1, local government 2 and local government 3 respectively.

For this aspect of the research the study used the risk self-assessment questionnaire in order to identify the risks that exist in local government finance. The risk self-assessment questionnaire was distributed to participants within the 3 case study areas from institutions that relate to process of financial management, including planning and budgeting, executing and administering, accounting, reporting, and controlling. For each

ISBN 978-0-9925622-1-2

local government, the study involved the planning agency, financial service office, auditor office and budget executor agency. The risk self-assessment form was used to capture the risks data and involved risk description, affected objectives, risk sources, consequences and risk likelihood. Furthermore, risk consequences and likelihood data are utilized for determined risk level. Risk level is combination of consequences and likelihood. This study uses a risk matrix as a qualitative method in determining risk level. This allows for a graphic depiction of the relationship between consequence, likelihood and the resulting risk level. Each square of risk matrix represents a risk level (NSW Treasury, 2012). The risk matrix used in the case studies is described below. Each colour determines significance level of risk in affecting objective achievement.

FIGURE 2. RISK MATRIX



Source: NSW Treasury, 2012 modified

TABLE 4. RISK LEVEL

Risk Group	Description	Level of Significance and Action Required for Risk Group
	Extreme	Risks are extremely significant in affecting objective achievement, and need treatment immediately
	Critical	Risks are very significant in affecting objective achievement, and need treatment
	Moderate	Risks are slightly significant in affecting objective achievement, and will be treated as long as the costs do not outweigh the benefits.
	Minimal	Risks are not at all significant, and need no treatment.

Source: NSW Treasury, 2012 modified

Findings

The survey analysis through the Tobit regression indicates, with a level of 95% confidence, two independents variable (FACTOR 1 AND FACTOR 3) are statistically significant in influencing dependent variable (level of objective achievement in local government finance). Factor 1 represents 31 risks that relating to financial matters and fraud. The risks are listed in Table 4 below:

TABLE 5. FINANCIAL AND FRAUD RISKS

No	Risks	No	Risks
	Financial Risks		
1	Timeliness of payment document completion	17	Failure of revenue information system
2	Less cash available in agency level	18	Enormous amount of unpaid tax
3	Agencies' financial statements are not presented on time	19	Inadequate evidence of accounting posting
4	Local government's financial statement is not presented on time	20	Inappropriate value of budget
5	Revenue target is not achieved	21	Improper account setting in budgeting process
6	Timeliness of budget approval	22	Improper fixed asset recording
7	Less cash/liquidity position at local government level	23	Improper expenditures recording
8	Inadequate budget value	24	Poorly skilled staff
9	Undetected false expenditure evidence	25	Over cash/liquidity position
10	Revenues are received late	**Fraud Risks**	
11	Expenditures exceed the budget	26	The staffs are not doing their jobs
12	Accounting record is not based on adequate evidence	27	Manipulation of payment and/or deposit evidences
13	Transactions are not recorded in accounting system	28	Misuse of authority by employees
14	Failure of accounting system	29	Cash misuse by employees
15	Failure of budgeting system	30	Theft and misuse of assets
16	Improper assets management	31	Transactions not recorded

Factor 1 (financial and fraud risks) shows negative sign of coefficient, which means that the increasing of the risk level should decrease level of the objective achievement. The finding aligns with previous discussion that post-decentralized local government finance in Indonesia still has weaknesses in accounting and reporting, financial matters, and presence of corruption.

Factor 3 represents 5 risks that come from external environment of local government, and involve inflation, changes of interest rates, terrorism, riots, earthquake and other natural disaster. Factor 3 shows positive sign of coefficient, and it is an unexpected result. It means that the increase in the risk level should increase the objective achievement. The increase in such risks may trigger the establishment and implementation of policies and action to anticipate impacts of the risks. This action may increase the possibility of local government in achieving the financial objectives. The positive result also can be interpreted that local government officers consider the external risks more as an opportunity than as a threat. This result also confirms the neutral definition of risks in International Standard of Risk Management/ISO 31000. The standard states that effect of uncertainty can be positive and/or negative (ISO 31000, 2009).

The result of the risk self-assessment questionnaire in 3 local governments shows fascinating findings. According to these results, local government 1, local government 2 and local government 3 identify 39 risks, 27 risks and 20 risks respectively. The grouping of identified risks are presented below:

TABLE 6. IDENTIFIED RISKS IN SELF-ASSESMENT

Location	Level of Risk				
	Extreme	Critical	Moderate	Minimal	Total
Local government 1	1	22	16		39
Local government 2	1	14	12		27
Local government 3		4	11	5	20

Both local government 1 and local government 2, identify one risk in the extreme category. The risks relate to human resource. Local government 1 recognizes that frequent employee turnover significantly impacts on objective achievement, and needs treatment immediately. In other case, local government 2 identifies shortage of employees as an extreme risk.

In the critical category, each local government recognizes financial and fraud risks as the risks that are very significant in affecting objective achievement, and need treatment. They also identify legal risks, operational risks, strategic risks, human resource risks and shortage of infrastructure. Table 6 is a summary of the critical risks that are identified by the three local governments:

TABLE 7. IDENTIFIED CRITICAL RISKS

No	Risks	Group of Risks
Local Government 1		
1	Improper payment request documents	Financial and fraud risks
2	Improper payment authorisation document	Financial and fraud risks
3	Improper expenditure evidences	Financial and fraud risks
4	Loss of revenue from fines	Financial and fraud risks
5	Loss of revenue from asset rent	Financial and fraud risks
6	Loss of revenue from asset selling	Financial and fraud risks
7	Improper account receivable recording	Financial and fraud risks
8	Loss of inventory	Financial and fraud risks
9	Improper inventory recording	Financial and fraud risks
10	Financial report is not align to standards	Financial and fraud risks
11	Incomplete documents of assets disposal	Financial and fraud risks
12	Loss of fixed assets	Financial and fraud risks
13	Contract payment exceeds the real progress	Financial and fraud risks
14	Usage of fund is not align with the local government regulation	Financial and fraud risks
15	Payment to employee is not align with regulation	Financial and fraud risks
16	Asset damage	Operational risks
17	Unsatisfied services to tax payer	Operational risks
18	Legal risk of asset ownership	Legal risks
19	Legal risk - investment is not supported with needed regulation	Legal risks
20	Lack of understanding of procurement regulation	Legal risks
21	Suppliers fail to fulfil contract schedule	Supplier risk
22	Regulation changes	Strategic risks
Local Government 2		
1	Poorly skilled staff	Human resource risks
2	Frequent Employee turnover	Human resource risks
3	Inadequate equipment (in quantity and quality)	Shortage of infrastructure
4	Posting inappropriate account	Financial and fraud risks
5	Budget is not approved as scheduled	Financial and fraud risks
6	Inadequate evidence of accounting posting	Financial and fraud risks
7	Transactions not recorded	Financial and fraud risks
8	Manipulation of payment and/or deposit evidences	Financial and fraud risks
9	Failure of budgeting system	Financial and fraud risks
10	Theft and misuse of assets	Financial and fraud risks
11	Financial reporting is not accordance with regulation	Financial and fraud risks
12	Sub-standard output of activities	Operational risks
13	Central government's policy changes	Strategic risks
14	Regulation changes	Strategic risks
Local Government 3		
1	Shortage of infrastructure	Shortage of infrastructure
2	Timeliness of payment document completion	Financial and fraud risks
3	Frequent Employee turnover	Human resource risks
4	Poorly skilled staff	Human resource risks

CONCLUSION

Considering its limitation, the study reveals that financial and fraud risks effect significantly post-decentralized local government in achieving financial objectives, and this aligns with previous studies and data. The study also recognizes that human resource problems, such as the shortage of employees, frequent employee turnover, and poorly skilled staff, need treatment immediately, since inadequacies in human resource, both the quality and quantity, can triggers the risks in other areas. Furthermore, the study reveals that legal issues, policy and regulation change are critical risks that need attention. Identifying the risk and its significance should give a broader perspective in understanding and solving problems of local government finance in post-decentralized Indonesia.

ENDNOTES

* I thank my supervisors, Prof. Fiona Verity and Dr. Noore Alam Siddique, for their support and guidance throughout the research, and for the valuable comments on this paper.

REFERENCES

ADB 2012. 'Republic of Indonesia: Local Government Finance and Government Reform', *Technical Assistance Report*, Asian Development Bank.

Aven, T 2011, 'On the New ISO Guide on Risk Management Terminology' *Reliability Engineering and System Safety* vol.96, pp. 719-725.

Bartlett, MS 1954, 'A Note on the Multiplying factors for Various Chi Square Approximations', *Journal of the Royal Statistical Society*, 16 (Series B), 296-8.

Beier, C & Ferrazi, G 1998, 'Fiscal Decentralization in Indonesia: A Comment on Smoke and Lewis', *World Development*, vol. 26, no. 12, pp. 2201-2211.

Badan Pemeriksa Keuangan Republik Indonesia/BPK-RI 2014, *Ikhtisar Hasil Pemeriksaan Semester I Tahun 2014*. Jakarta.

Badan Pengawasan Keuangan dan Pembangunan/BPKP 2007, *Pedoman Risk Assessment*. Jakarta.

Chan, RKH, Takahasi, M, & Wang, LL 2010, *Risk and public policy in East Asia*, Ashgate, Farnham.

Dasgupta, B, Narayan, A, & Skoufias, E 2009, 'Measuring the Quality of Education and Health Services', *World Bank Policy Research Working Paper* no. 5033.

Gujarati, G, 2004, *Basic Econometric*, Fourth Edition, The McGraw-Hill.

Hadiz, VR 2004, 'Decentralization and Democracy in Indonesia: A Critique of neo-Institutionalist Perpectives', *Development Change*, vol.35, no. 4 pp. 697-718.

ISO 2009, 'Risk Management - Principles and Guidelines", ISO 31000:2009.

Kaiser, H 1970, 'A Second Generation Little Jiffy', *Psyichometrica*, vol. 35, 401-15.

Kaiser, H 1974, 'An Index of Factorial Simplicity', *Psyichometrica*, vol. 39, 31-6.

Lewis, BD 2005, 'Indonesian Local Government Spending, Taxing and Saving: An Explanation of Pre and Post Decentralization Fiscal Outcomes', *Asian Economic Journal*, vol. 19, no. 3, pp. 291-317.

Lewis, BD 2008, 'A Note on the Indonesia Subnational Goverment Surplus, 2001-2006', *Decentralization Support Facility*.

Lewis, BD 2010, 'Indonesia Decentralization: Accountability Deferred', *International Journal of Public Administration*, vol. 33, pp. 648-657.

Lewis, BD & Oosterman, A 2009. 'The Impact of Decentralization on Subnational Government Fiscal Slack in Indonesia', *Public Budgeting and Finance*, vol. 29, no. 2, pp. 27-47.

Local Government Financial Data, 2014. Available from: http://www.djpk.depkeu.go.id/data-series/data-keuangan-daerah/setelah-ta-2006.

McIntyre, T 2013, 'In the name of sustainability: Deforestation in Malaysia and Indonesia', *Chain Reaction*, vol. 118, pp. 44-45.

New South Wales (NSW) Treasury (2012a), 'Risk Maangement Toolkit for NSW Public Sector Agencies: Volume 1 - Guidance for Agencies', New South Wales Government

Pallant, J. F. (2013). *SPSS survival manual : a step by step guide to data analysis using IBM SPSS*, 5th edition, Allen & Unwin, Sydney.

Purdy, G 2010, 'ISO 31000:2009—Setting a New Standard for Risk Management', *Risk Analysis*, vol. 30, no. 6

pp. 881-886.

Resosudarmo, BP & Vidyattama, Y 2006, 'Regional Income Disparity in Indonesia', *ASEAN Economic Bulletin, vol.* 23, no. 1, pp. 31-44.

Rinaldi, T, Purnomo, M & Damayanti, D 2007, 'Fighting Corruption in Decentralized Indonesia', World Bank.

Shah, A, Qibthiyyah, R & Dita, A 2012, 'General Purpose Central-provincial-local Transfer (DAU) in Indonesia', *World Bank Policy Research Working Paper,* no. 6075.

Sidiquee, NA, Nastiti, D & Sejati, NA 2012, 'Regional Autonomy and Local Resources Mobilization in Eastern Indonesia: Problems and Pitfall of Fiscal Decentralization', *Asian Affair: An American Review*, vol. 39, pp. 44-69.

Smoke, P & Lewis, BD 1996, 'Fiscal Decentralization in Indonesia: A New Approach to an Old Idea', *World Development,* vol. 24, no. 8, pp. 1281-1299.

Turner, M, Imbaruddin, A and Sutiyono, W 2009, 'Human Resources Management: The Forgotten Dimension of Decentralization in Indonesia', *Bulletin of Indonesia Economic Studies*, vol. 45, no. 2, pp. 231-249.

Widhyantoro, S 2009, *Risk Assesment dalam Kerangka Manajemen Risiko pada Badan Pengelolaan Keuangan Daerah Kabupaten Kulon Progo*, Master thesis, Gadjah Mada University.

Yong, AG & Pearce, S (2013), 'A Beginner's guide to Factor Analysis: Focusing on Exploratory Factor Analysis', *Tutorial in Quantittative Methods for Psychology*, vo. 9 no. 2, pp79-94.