RISK MANAGEMENT IN INDONESIA'S LOCAL GOVERNMENT FINANCE—TOWARD AN INTEGRATED FRAMEWORK

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ABSTRACT

The study investigates the risks of local government finance in Indonesia and proposes a country specific framework for risk management at the local level. After the enactment of autonomy laws in 1999, the structure of the Indonesian public sector was transformed from being mostly centralized to mostly decentralized. Although decentralization brought improvements to Indonesia's public sector, there has been ongoing concern about the flaws and risks present in local government financial management. Local government faces increasing exposure to risk, including corruption and fraud, and this has consequences for achieving service delivery objectives. In view of these risks, there is a case for greater attention to risk management.

This study explores of the nature of risks within Indonesian local government finance and develops a potentially effective form of risk management. Using qualitative and quantitative approaches—a countrywide survey and three in-depth case studies—this research explores the views of people in Indonesian local government on risk and current efforts for managing risk in post-decentralization local government. This study finds that some risks, such as fraud risk, human resource related risks, legal risk, asset management related risk, and risks of political change and intervention, significantly affect the achievements of Indonesian local government finance. However, there are inherent weaknesses involved in the efforts of local government to manage risk. The efforts are sporadic and do not comprehensively assess and treat the risks. Risk controls are poorly documented and there is a need for further guidance about how they are to be implemented. This makes it difficult to consistently implement and replicate the controls. Efforts are also diminished by the absence of a formal mandate. This study shows that lack of an adequate mandate, lack of guidance and lack of commitment are common issues in implementing integrated formal risk management.

To address these issues, this study proposes a framework for managing risk in Indonesian local government. The framework was developed based on relevant Indonesian regulations, international standards (ISO 31000:2009), literature, and consideration of the needs of Indonesian local government. The framework involves steps for implementing risk management in local government: enacting regulation as

a mandate, setting up a risk management implementation committee at local government and agency level, designing a framework that produces an implementation plan and standard operating procedures for implementing risk management processes, implementing the framework, monitoring and review of the framework, and continual improvement of the framework. Finally, given there is paucity of research on risk management in Indonesian local government finance, this study seeks to fulfil that gap.

CERTIFICATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

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GLOSSARY

APBD	Anggaran Pendapatan dan Belanja Daerah—local government annual budget
ADB	Asian Development Bank
BAPPEDA	Badan Perencanaan Pembangunan Daerah—local development planning agency
BOS	Bantuan Operasional Sekolah – School operational fund
BPKAD	Badan Pengelola Keuangan dan Asset Daerah –Financial and asset management agency
BPK-RI	Badan Pemeriksa Keuangan Republik Indonesia—Audit Board of the Republic of Indonesia
BPKP	Badan Pengawasan Keuangan dan Pembangunan—Financial and Development Supervisory Board
BUD	Bendahara Umum Daerah—local government's general treasurer
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CSA	Control self-assessment
DAK	Dana Alokasi Khusus—special purpose grant
DAU	Dana Alokasi Umum—general purpose transfer
DPA	Dokumen Pelaksanaan Anggaran—budget execution document
DPD	Dewan Perwakilan Daerah - The house of regional

	representative of the Republic of Indonesia or senate
DPR	Dewan Perwakilan Rakyat—The house of representatives of the Republic of Indonesia or national parliament
DPRD	Dewan Perwakilan Rakyat Daerah—the local parliament
EFA	Exploratory factor analysis
FERMA	Federation of European Risk Management Associations
GAO	General Accounting Office
GDP	Gross domestic product
GPT	General purpose transfer
GR	Government regulation
HR	Human resources
IDR	Indonesian rupiah
Kabupaten	A type of Indonesia local government—regency or district
Kota	A type of Indonesia local government—city
KPA	Kuasa Pengguna Anggaran—representative of PA (see PA)
KPK	Komisi Pemberantasan Korupsi—Commission for Corruption Eradication
KUA	Kebijakan Umum Anggaran Pendapatan dan Belanja Daerah—general policies of local government's budget
MoIA	Ministry of Internal Affairs
MOU	Memorandum of understanding
NGO	Nongovernment organization

NSW	New South Wales
PA	Pengguna Anggaran—budget user is an officer who has authority in budget disbursement
PAF	Principal axis factoring
PCA	Principal component analysis
PRA	Probabilistic risk analysis
PPK-SKPD	Pejabat Pengelola Keuangan SKPD (see SKPD)—unit's financial administrator
PPKD	Pejabat Pengelola Keuangan Daerah—local government's financial management officer
RPJPD	Rencana Pembangunan Jangka Panjang Daerah— local government's long-term development plan for 25 year period
RPJMD	Rencana Pembangunan Jangka Menengah Daerah— local government's midterm development plan for 5 year period
RKPD	Rencana Kerja Pemerintah Daerah—local government's annual development planning
SILPA	Sisa Lebih Perhitngan Anggaran – Budget surplus
SBREC	Social and Behavioural Research Ethics Committee
SKPD	Satuan Kerja Pemerintah Daerah—unit/agency/office of local government
SOP	Standard operating procedure
SPIP	Sistem Pengendalian Intern Pemerintah – Government internal control system.
SPD	Surat Penyediaan Dana—letter for provision of fund

SPM	Surat Perintah Membayar—payment order letter
SPP	Surat Permintaan Pembayaran—payment request letter
SPPD/SP2D	Surat Perintah Pencairan Dana—letter for cash payment order
TAPD	Tim Anggaran Pemerintah Daerah—local government's budgeting team
UPB	Unit Pengguna Barang – Asset user
UPS	Uninterruptable power supply
UPT	*Unit Pelaksana Teknis* – Technical implementation units
PPAS	Prioritas dan Plafond Anggaran Sementara—priority and tentative ceiling of budget
Post-decentralization	A period in Indonesia after enactment of a set of decentralization/autonomy regulations in 1999

CHAPTER 1 : INTRODUCTION

1.1 Research Background

This thesis explores risk management practices that were introduced in Indonesia in response to a perceived need for improvement in the ways local government manages risk. The need arose in line with decentralization in the Indonesian public sector, a process that is continually evolving and involves local government across Indonesia. It has led to local governments taking more fiscal responsibility. The need for risk management is a response to uncertainty and the increasing risk exposure that is a result of this decentralization.

Indonesia lies along the equatorial line located between 6°04'30" North latitude and 11°00'36" South latitude, and between 94°58'21" and 141°01'10" East longitude, and has total area of 1,913,578.68 km^2 consisting of 17,504 islands (Badan Pusat Statistik, 2016). Indonesia has 34 provinces, 410 districts (*kabupatens)* and 98 cities *(kotas*). Among subnational governments there is one kabupaten (district) and five *kota* (cities) in the Jakarta capital region that are administrative and not autonomous. Of the rest, there is one province, one *kota* and 15 *kabupatens* that are not operational at the time of this research because they were formed recently (Ministry of Internal Affair, 2013).

It has been argued that Indonesia's public sector has been transformed from being the highly centralized (Smoke & Lewis, 1996) into 'among the most decentralized developing countries' (Shah, Qibthiyyah, & Dita, 2012, p. 2). Lewis and Oosterman (2011) wrote 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 22/1999) and another on fiscal and finance issues (Law 25/1999). They noted:

> In December 2000, Law 34/2000, an additional and essential piece of decentralization legislation on subnational government taxation, was passed by the national parliament (Dewan Perwakilan Rakyat or DPR). In late 2004, Indonesia initiated a redesign of its basic decentralization framework by issuing revisions to two major pieces of legislation, Law 32/2004 on administration and Law 33/2004 on fiscal matters. (Lewis & Oosterman, 2011, p. 151)

Each of Indonesia's autonomous regions has its own leader and legislative body elected by popular vote for a five-year term. Since the enactment of decentralization laws, these bodies play a greater role in administering their areas, including financial management. According to Law 23/2014, local government is obligated to provide basic mandatory services such as education, health services, civil work and spatial planning, housing, community protection, and social affairs. Local government is required to develop new systems for the provision of services (Republic of Indonesia, 2014c). These can be inherently complicated systems that need extensive resourcing and effective technologies. The changing of local governments' financial systems and this inherent complexity, together with the problems and weaknesses that appear in post-decentralization local government finance, can coalesce to increase uncertainty in achieving local government objectives.

In other words, local government faces risks, because risk is associated with uncertainty and complexity (Chan, Takahashi, & Wang, 2010). Identifying and analyzing the risks that appear in local government finance is important for understanding the impact on achievement of objectives (Republic of Indonesia, 2008c). However, risk and risk management in Indonesian local government is a new area and there is a paucity of research on this matter. In this context, the objective of this thesis is to discuss the risks that have emerged in Indonesia's post-decentralization local government financial systems and develop a contextually relevant system, which can be implemented to manage these risks.

1.2 Scope and Process of Local Government Finance

Decentralization has marked a new era in local government finance in Indonesia. It has brought new provisions in regulation regarding financial matters, such as local revenue, expenditure, and the form of central–local financial relationship. These have widened the scope and responsibility of local government authorities in managing finances. This section will discuss the reach and challenges of local government finance in the context of decentralization in Indonesia.

Local government finance is a vast area of discussion and is an aspect of all operations of any local government. At its most basic, local government agencies cannot deliver their services without financial resources. Local government offices cannot procure goods or services without financial support. These examples demonstrate the importance of financial matters relating to local government activities.

According to the Indonesian Ministry of Internal Affairs (MoIA) Regulation Number 13/2006 and its revision Number 59/2007, ‘local government finance covers key areas which include (1) local government’s authority regarding local taxation, retributions and debts; (2) responsibilities in conducting local affairs and paying liabilities; (3) cash receipt; (4) 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’ (Minister of Internal Affair, 2006, p. 9).

The first two points above indicate Indonesia local government’s right to raise revenue and manage expenditure in order to deliver public services. Local government revenue, according to the MoIA regulation, involve (1) own-source revenue that is generated from local tax, user charges, profits shared from local government-owned companies and other own-source revenue; (2) central government transfers including general purpose transfer (Dana Alokasi Umum/DAU) and special purpose grant (Dana Alokasi Khusus/DAK); (3) shared revenues, such as revenues from natural resources; (4) other revenues, such as donations, emergency funds from central government, shared, regional tax from province, adjustment funds and supporting funds from province or other local government (Minister of Internal Affair, 2006).

Though local government’s own revenues are fully controlled by local government, they do not contribute significantly to revenue (Sidiquee, Nastiti, & Sejati, 2012) and in 2010 represented approximately 16% of total local government revenue (Asian Development Bank, 2012). In other words, central government’s transfer (general purpose transfer and special allocation grants) still forms the largest part of local government revenues. As well, in some regions in Indonesia, shared revenue from natural resources (another form of central government transfer) is the largest part of local government revenue. For example, according to its annual budget figures for 2013, Kutai Kartanegara Regency (in the East Kalimantan province) would receive share revenue, including natural resources, from the central government of about 3.786 trillion Indonesian Rupiah (IDR) or around USD 407 million (assuming US 1=IDR 9,300). This amounts to 76.20% of its total estimated revenue (Ministry of Finance, 2013).

According to the MoIA Regulation Number 13/2006, expenditure is classified into two main categories: indirect and direct expenditures. Indirect expenditures do not have direct connection to execution of programs and activities, but are needed to deliver public services, such as salaries, interest, donations, subsidies, social support, financial assistance and extraordinary expenditure. Direct expenditures can be traced to their programs or activities. The expenditure is also classified by types: labor, goods/services and fixed asset/capital expenditures (Minister of Internal Affair, 2006).

Budgeted revenue and expenditure are rarely in a balanced state, and a surplus or deficit most always occurs in local government budgeting and budget execution. Lewis (2008) defined local government surplus/deficit as the increase/decrease in reserve funds from one year to the next. Furthermore, he found that between 2001 and 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, p. 2). According MoIA Regulation Number 13/2006, local government has authority to deal with a deficit by using some sources of funding. Any surplus can be disbursed to repay the local government’s debt, invest in local government-owned companies, lend to the central government or other local governments, and fund social safety programs.

After budget setting that involves revenues, expenditures and financing, local government executes the budget. Cash receipts and disbursements are a form of budget execution. Local government receives cash from taxes, service charges and other revenue. Then, local government disburses cash in order to conduct government affairs and to deliver services. Furthermore, local government finance includes local government assets management, which covers activities in acquisition, utilization, recording, maintenance, and disposal of assets. The scope of local government finance is summarized in Figure 1.1 below.

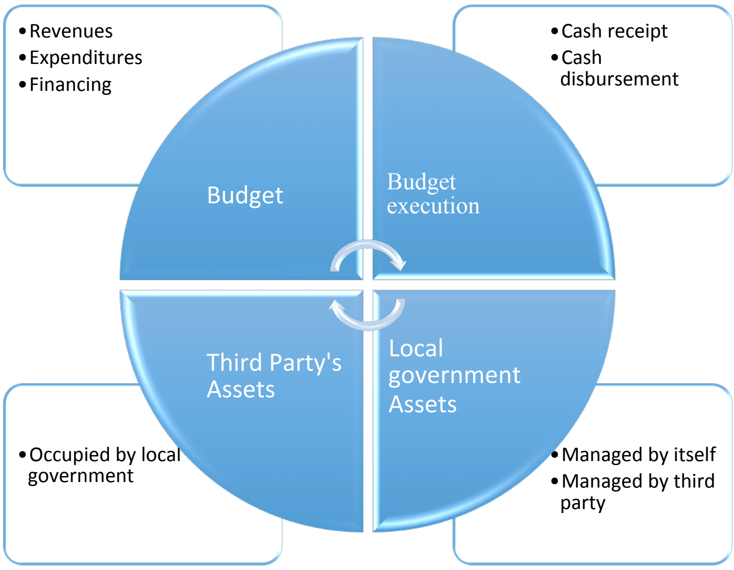

Figure 1.1: The Scope of Local Government Finance

Source: Summarized from Ministry of Internal Affairs Regulation Number 13/2006

An important contextual factor for this research is the way in which 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 illustrates this complexity. It can result in lack of transparency, inequity, and uncertainty in allocation (Shah et al., 2012). Shah and colleagues stated that GPT involving expenditure determination uses a one-size-fits-all approach and assumes the per capita fiscal needs of large cities are similar to those of small towns or rural districts. However, this creates injustices for large urban and large rural areas. Furthermore, Shah and colleagues have made 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, p. 11).

Further, according to Indonesian Ministry of Internal Affairs Regulation Number 13/2006, local government financial management is a process that involves activities such as planning, executing, administering, reporting, controlling, and accountability. This is a cycle in which all these activities form a holistic management process. The output of a planning activity becomes the input for the next activity, and the output of a control or accountability activity becomes the input or feedback for a planning activity. This cycle is illustrated in Figure 1.2 below.

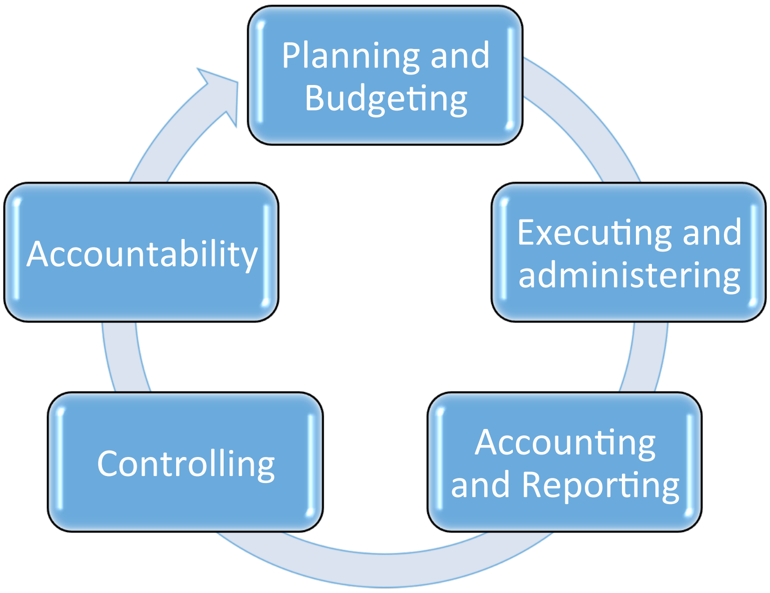

Figure 1.2: The Cycle of Local Government Finance

Source: Summarized from Ministry of Internal Affairs Regulation Number 13/2006

The cycle of local government finance is a complex process that involves executive and legislative branch of local government. The process is described in details in Appendix A.

The previous discussion demonstrates the complexity and scope of managing finances at the local government level. Local government has to manage all aspect of its finance, involving revenue, expenditure, and assets, in delivering local services. Changes to the financial management processes of local government have resulted in problems that have appeared in post-decentralization Indonesian local government, as discussed in next section.

1.3 Research Questions

The process of decentralization has been marked by weaknesses and problems that can be seen as distracting local governments from achieving their objectives. Some studies indicate a range of weaknesses and challenges including, in particular, the work of Lewis (2008) and Lewis and Oosterman (2009).

One challenge is that the accumulation of significant idle funds in Indonesia reached approximately 3% of gross domestic product (GDP) from the unmatched budget between 2001 and 2006 (Lewis, 2008). As Lewis and Oosterman have suggested, this was caused by increases in central government transfers and underestimating shared natural resource revenues, accompanied by overestimating spending (Lewis and Oosterman, 2009). Furthermore, Lewis proposes that the idle funds reflect unfulfilled programs or activities and may affect the capacity of local government to deliver services and fulfil public needs in order to satisfy constituents. However, other aspects are also important such as actual quality of services, budget transparency and trust (Lewis, 2010).

There are substantial weaknesses in accounting and reporting as components of accountability in local government finance (BPK-RI, 2014). For the fiscal year 2013, The Audit Board of The Republic of Indonesia/BPK-RI, 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. BPK-RI indicated weakness related to local government financial accounting and reporting, such as in fixed asset management, cash management, local government investment, inventory, and capital expenditure or goods/services procurement.

Corruption is also a risk. Regional autonomy and decentralization has had the drawback of triggering corruption across the country. Some writers have made the point that corruption, collusion, and nepotism have moved to the local level (Hadiz, 2004; Rinaldi, Purnomo, & Damayanti, 2007). These acts were commited by both the executive branch and legislators. According to Rinaldi, Purnomo, and Damayanti (2007), as of 2006, 265 corruption cases involving 967 local parliament members were identified and handled by 29 District Prosecutor Offices. The prosecutor offices also handled 46 corruption cases committed by 61 regents/mayors (Rinaldi et al., 2007). In addition, from 2004 to 2011, *Komisi Pemberantasan Korupsi* or KPK (Commission for Corruption Eradication) handled 49 corruption cases that involved members of local parliament and 37 cases that involved governors/regents/mayors (KPK, 2011). Such findings may represent "the tip of iceberg" for local government financial management flaws.

The weaknesses and problems indicated above point to issues about Indonesia decentralization processes. There are comparable examples. South Africa is a case where decentralization has failed in fulfilling its promises. Instead of decentralization enhancing participation, democratization, and development in South Africa, it is seen to have triggered a state in municipal governance '… of paralysis, service deliver failure, and dysfunction' (Koelble & Siddle, 2013, p. 343). Koelble and Siddle (2014) argued that the institutional design of decentralization was highly complex and based on a set of underlying preconditions that were not applicable in the South African situation. Further, they identified two preconditions that were absent and caused failure in South Africa's decentralization: an adequate administrative apparatus and reliable accountability system (Koelble & Siddle, 2014).

Amid its decentralization process, Indonesia imposed the implementation of government internal control system (*sistem pengendalian intern pemerintah*/SPIP), which is based on Government Regulation Number 60/2008. This system was adopted from COSO's internal control framework which originated from the private sector (Kastowo, 2012). It was an effort to implement what Siltala writes as '…market principles and business-management techniques from private into public sector', also called New Public Management (NPM) (Siltala, 2013, p. 469). In other words, a focus on private sector management styles (Hyndman & Lapsley, 2016). NPM has been widely practiced by both developed and developing countries. A study by Hood and Dixon (2015) on United Kingdom's (UK) implementation of NPM, revealed that after three decades of NPM reforms the UK faced comparatively worse fairness/consistency of public administration performance and worse running cost performance. The running costs of civil departments rose by about 40% in constant price term, and was compounded by the increase of complaints about maladministration via the Ombudsmen and the courts (Hood & Dixon, 2015). However, the NPM story is not over yet. In case of the UK, NPM has penetrated and is embedded within public services. It spreads deeper in public services like a virus. NPM is not a specific managerial tool and techniques, since particular ideas come to the fore at different times and contexts. Like a virus, Hyndman & Lapsley suggests 'NPM adapts and mutates' (Hyndman & Lapsley, 2016, p. 405).

As discussed, decentralization has changed local government financial systems, increasing their complexity and triggering problems. Adoption of SPIP, as a form of an NPM initiative, places Indonesia in a similar situation as other countries that implement NPM. In light of other countries' experiences and considering process of the decentralization, it raises the question about the extent to which Indonesia faces increased risk exposure in local government finance. This situation motivates the questions addressed in this research: What are the risks that significantly influence post-decentralization Indonesian local government's achievement of financial objectives? Further, how can these risks be better identified and managed in the context of local government? In other words, how should local government manage the identified risks?

1.4 Purposes of the Research

Risk management is a new field in Indonesian local government. Thus, existing research on this topic is sparse and, in practice, there are limited examples of comprehensive risk management approaches. In the context of this vacuum and considering the research questions, this study has three purposes:

(1) To examine the nature and sources of risks within Indonesian local government finance and demonstrate how the risks affect the achievement of local government objectives.

(2) To examine and analyze the efforts of local government to manage and treat risks, and to identify the strengths and weakness of the efforts.

(3) To suggest a framework for treating or modifying risks, thereby promoting good governance at the local government level.

This study examines risks in local government finance and analyzes local government management of the risks, including its assessment and treatment the risks, as a part of efforts to accomplish organizational objectives. The study attempts to identify the processes of local government financial management, identify the risks that appear and their sources. It also identifies local government efforts and obstacles to dealing with risks and develop explanatory frameworks for risk management in local government circumstances.

The following guiding questions elaborate on the key questions structuring this research.

(1) To examine the nature of risks within local government finance and demonstrate how the risks affect the achievement of local government goals and objectives.

Guiding questions:

a) What are risks that significantly influence achievement of local government objectives?
b) How do risks influence attainment of local government financial objectives?
c) What are factors that cause such risks?

(2) To examine and analyze the efforts of local government to manage and treat risks, and to identify the strengths and weakness of the efforts.

Guiding questions:

a) How does local government treat risks that appear in financial management processes?
b) What are the strengths and weaknesses of local government's efforts in dealing with risks?

(3) To suggest a framework for treating risks, thereby promoting good governance at the local government level.

Guiding questions:

a) What are the weaknesses and limitations of the current approach to risk management at the local level?
b) How can local government overcome these weaknesses and limitations in order to make improvements?
c) What kind of risk management framework would be suitable for circumstances of local government finance?

1.5 Thesis Outline

Chapter 1 has described the background to the research and its objectives. Chapter 2 reviews literature relating to decentralization and fiscal federalism, decentralization in Indonesia, and risk management in an Asian context. This discussion addresses debate on decentralization with a particular focus on decentralization under Indonesian Law Number 5/1974, and major features of current decentralization processes. Canvassed also is risk and risk management from an Asian perspective. Chapter 3 explains the methodological approach of the research and the strategies used to explore the questions and arrive at a risk management framework for dealing with risks in the Indonesian local government context. The chapter also describes the methods used for data collection and the process of analyzing the data.

Chapters 4 and 5 focus specifically on risks that emerge in post-decentralization Indonesia's local government, and both present research data. Chapter 4 discusses describes the risks that influence local government finance based on data collected through a countrywide survey and self-risk assessment. The chapter also describes findings about the nature of the risks in local government finance, especially the areas that affected by the risks and sources of the risks. Chapter 5 explores in more depth risks that appear in Indonesia's post-decentralization local government finance using data from case studies of three Indonesian local governments.

Chapters 6 and 7 focus on risk management in Indonesian local government. Chapter 6 begins with an overview of current practices based on existing regulations and international risk management standards. This is followed by a discussion of survey findings about how risks are managed. Discussed also are weaknesses of the current risk management in Indonesian local government. Chapter 7 explores in more depth practices of risk management in Indonesian local government. The chapter discusses efforts of local government in managing each risk respectively based on reaction of local government to identified risks. This is followed by description of the current stage of the local government risk management system and its weaknesses.

Chapter 8 discusses sources for developing a formal and integrated risk management system in Indonesia: current regulation and international standards. This chapter consists of three sections. The first section explores weakness and obstacles of implementing the current system of managing risks as a starting point for improving the approach. The second section discusses international standards and the Indonesian regulation that should be the starting point for developing any effective risk management system. The third section concludes discussion in this chapter.

Chapter 9 proposes a risk management framework for Indonesian local government. The chapter describes a framework that should be suitable for the specific circumstances of Indonesia local government. Chapter 10 summarizes findings of the study. Further, the chapter describes contributions of the study to the risk and risk management debate, and its contribution to Indonesian public sector governance. The chapter also recognizes limitations of the study and makes recommendations for future research.

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

As discussed in Chapter 1, this study investigates risks that appeared in Indonesian local government after the implementation of decentralization. Decentralization changed the roles of local governments, including scope of the services and their financial aspects. This has been a massive transformation involving hundreds of local governments across Indonesia. It may the biggest case of decentralization in contemporary study of public governance. An understanding of these changes is important for this study and for establishing the position of Indonesian decentralization in broader discussions of federalism and fiscal decentralization as a contribution to public governance studies.

The previous chapter quoted studies stating that changes resulting from decentralization raise problems in local government financial management. This demonstrates the existence of uncertainty, that is, the presence of risk, that local government needs to deal with. However, risk and risk management is a new area in studies of the Indonesian public sector. The scarcity of relevant studies focused on Indonesia forces consideration of a wider range of relevant material addressing all of Asia. Although the study of risk and risk management in Western settings is well developed, studies on these matters in Asian contexts are extremely limited.

This chapter presents a review of literature relating to decentralization and fiscal federalism, decentralization in Indonesia, and risk management in Asia. Most of the literature was identified using FindIt@Flinders, a search engine at Flinders University that connects to many databases. The search was conducted using keywords, such as decentralization, fiscal federalism, risk, risk management, risk management in public sector, risk management in Indonesia, risk management in Asia, risk analysis, risk and public policy. The chapter is organized into three sections. The first section discusses fiscal federalism theory and its relation to fiscal decentralization. This discussion is needed for describing debates on matters such as the background for decentralization and for identifying where Indonesian decentralization should be placed in a broader context. The second section describes decentralization in Indonesia, with a particular focus on decentralization under Law Number 5/1974, and the major features of the current decentralization. The third section describes risk and risk management from an Asian perspective.

2.2 Decentralization and Fiscal Federalism

Any discussion about risk management in Indonesian local government finance cannot be separated from a discussion of decentralization and its genesis in fiscal federalism, as risks that appear in current local governments cannot be separated from the change resulting from the decentralization process. Decentralization is one of the most important changes of the past generation, both in terms of geographical scope and the implications for the quality of governance. It has been extensively implemented across many nations; rich and poor, large and small, and with very different colonial histories (Faguet, 2014). Not surprisingly, decentralisation programs are hot topics of research. See for example; Brazil (Do Vale, 2016; Garman, Haggard, & Willis, 2001; Rosenn, 2005; Vlahos, 2013); Sub Saharan Africa countries (Erk, 2014); microstates (Veenendaal, 2015);Bolivia (Faguet & Sánchez, 2008); Colombia (Faguet & Sánchez, 2008; Garman et al., 2001); OECD countries (Baskaran & Feld, 2013; Bodman, 2011); Italy (Cavalieri & Ferrante, 2016; Vlahos, 2013); France (Vlahos, 2013); Pakistan (Guess, 2005); Philippines (Guess, 2005); China (van Der Kamp, Lorentzen, & Mattingly, 2017; Weingast, 2014); Indonesia (E. Ahmad & Mansoor, 2002; Bjork, 2003; Bunnell, Miller, Phelps, & Taylor, 2013; Chowdhury & Yamauchi, 2010; Guess, 2005; Holtzappel, 2009; Holzhacker, 2015; Nasution, 2016; Pepinsky & Wihardja, 2011; Sutiyo & Maharjan, 2017); Venezuela (Garman et al., 2001); Argentina (Garman et al., 2001); Mexico (Garman et al., 2001); South Africa, South Korea and Spain (Do Vale, 2016), and much more.

This section discusses pros and cons of decentralization and fiscal federalism. The term “fiscal federalism” was introduced by Richard Musgrave in 1959 and popularized by Wallace E Oates in 1970 with a book *Fiscal Federalism* (Chandra Jha, 2015, p. 241). The discussion in this section will provide background information, including a description of Indonesia’s decentralization.

Biela, Hennl, and Kaiser proposed definitions of decentralization, and federalism. They defined decentralization as “autonomy of subnational levels to allocate resources within their jurisdictions” (Biela, Hennl, & Kaiser, 2012, p. 448).

Further, they described "federalism as a constitutionally guaranteed division of competences between territorially defined governmental levels" (Biela et al., 2012, p. 448). Erk (2014) compares the two as follows:

> In federalism, existence of the constituent entities and their autonomous power are constitutionally entrenched: that is, they cannot be created, merged, or abolished by ordinary legislation passed by the central government. Decentralization, on the other hand, is by definition an act of the centre as it devolves some of its powers to regional and local government. The existence and autonomy of the subnational units are not enshrined in the constitutions; their numbers, borders, and powers can be determined and changed by the central government; what they do and how they do it can be set by the centre. (Erk, 2014, pp. 536-537)

However, decentralization is more than just allocation of resources. It involves attributes such as administrative, political, and economic matters. Faguet (2014) proposed that:

> Decentralization as the devolution by central government of specific functions, with all of the administrative, political, and economic attributes that these entail, to regional and local government that are independent of the centre within given geographic and functional domains (Faguet, 2014, p. 3).

Therefore, according to Veenendaal (2015), the existence of federalism is influenced by some factors, such as level of economic development, cultural factors and regime types. Further, Oates (1999) stated that

> as a subfield of public finance, fiscal federalism addresses the vertical structure of the public sector. It explores, both in normative and positive terms, the roles of the different levels of government and the ways in which they relate to one another through such instruments as intergovernmental grants. (Oates, 1999, p. 1120)

Oates argued that the traditional theory of fiscal federalism sets up a normative framework for the assignment of functions to different levels of government, for example, the responsibility of central government for stabilizing macroeconomic factors and redistributing income as assistance for the poor. The theory also considers the appropriate fiscal instruments for carrying out these functions (Oates, 1999). This theory has evolved since it emerged in the 1950s and 1960s. According to Oates (2005), three scholars played a key role in advancing this perspective of the public sector: Kenneth Arrow, Richard Musgrave, and Paul Samuelson. Oates describes their contributions:

> Samuelson's famous two papers (1954, 1955) on the nature of public goods, Arrow's conceptualization (1970) of the roles of the private and public sectors, and Musgrave's monumental volume (1959) on public finance propose ideas about an active and positive role for the government sector in terms of correcting various forms of market failure, establishing an equitable distribution of income, and stabilizing the macro-economy. (Oates, 2005, p. 350)

The basic argument put forward by Oates in his decentralization theory is that decentralized provision of resources is generally more efficient than centralized supply, subject to specific conditions such as scale effects. Provision of public services and goods should be located at the lowest level of government encompassing the relevant benefits and costs (Oates, 1999) or in other words, each public good and service should be provided by the territory that would most understand its benefits and costs (Garman et al., 2001). His rationale is that policy makers at the subnational level are better informed about local resource needs than policy makers at the central level (Biela et al., 2012).

Oates reviewed fiscal federalism and the assignment of functions to levels of government, the welfare gains from fiscal decentralization, and the use of fiscal instruments. According to Oates:

> Sub-national governments have their function in the provision of goods and services whose consumption is limited to their own jurisdictions. Justification for this view is that by tailoring outputs of such goods and services to the particular preferences and circumstances of their constituencies, decentralized provision increases economic welfare above that which results from the more uniform levels of such services that are likely under national provision. The efficient level of output of a local public good is likely to vary across jurisdictions as a result of both differences in preferences and cost differentials. Maximizing overall social welfare requires that local outputs vary accordingly. (Oates, 1999, pp. 1121-1122)

Oates (1999) proposed that the magnitude of welfare gains depends both on the extent of the heterogeneity in demands across jurisdictions and any inter-jurisdictional differences in costs. Oates suggested that the potential welfare gains from decentralized finance may be quite large. In the same essay, Oates spotlighted fiscal instruments in the context of fiscal federalism. To carry out their functions, the various levels of government require specific fiscal instruments. On the revenue side, governments typically have access to tax and debt instruments. Oates (1999) also discussed intergovernmental grant and revenue sharing, emphasizing potential roles for such grants including “internalization of spill over benefits to other jurisdictions, fiscal equalization across jurisdictions, and an improved overall tax system” (Oates, 1999, p. 1126).

In his work, Oates presents an interesting perspective on intergovernmental grants. Grants can take either of two general forms. They can be conditional grants that specify various restrictions on their use by the recipient, or they can be unconditional, that is, a lump-sum transfer to be used in any way the recipient wishes. Conditional grants in the form of matching grants are to be employed where the provision of local services generates benefits for residents of other jurisdictions. Unconditional grants are typically the appropriate tools for purposes of fiscal equalization. The purpose of unconditional grants is to transfer funds from relatively wealthy jurisdictions to poorer ones. These formulas result in a disproportionate share of the transfers going to those jurisdictions with the greatest fiscal need and the least fiscal capacity (Oates, 1999). Although widely used, Broadway (1996) suggested that equalizing intergovernmental grants are by no means a necessary feature of fiscal federalism (Boadway, 1996). As stated by Usher (1995), “the equalization payments may well provoke precisely the dissension, ill-will, rent seeking and blackmail among provinces, and ultimately among citizens in the different provinces” (Usher, 1995, p. 103).

In short, the proponents of fiscal federalism suggest that provision of public services would be better located at the lowest level of government. They contend that subnational governments have more chance of delivering public services that are adapted to the particular needs of their jurisdictions, ultimately increasing welfare gains from decentralized finance. Furthermore, many theoretical arguments and empirical proofs are provided for motivating decentralization implementation.

2.2.1 Critiques of an ideal model of decentralization

However, there are critiques of this pure or ideal model of decentralization, a system in which local government raises pure local revenue and disburses its expenditure without benefits of central government transfer, as proposed by fiscal federalism theory. Prud’homme (1995) argued that this type of decentralization has three inherent weaknesses: it can increase disparities among local governments, endanger economic stability, and weaken efficiency (Prud'homme, 1995).

Prud’homme’s first critique was that a decentralized system can increase disparities among local governments because the local jurisdiction would collect all taxes from, and undertake all expenditures on behalf of, its residents. This means that local government can only raise revenue on its own real revenue base. Thus, poor regions laboriously collect limited amounts of money whereas richer jurisdictions accumulate revenue easily because of their existing condition. Obviously, pure decentralization cannot solve this problem. By contrast, a centralized system would redistribute income from richer to poorer areas, even under regressive tax and expenditure systems in which per capita expenditures or benefits increase as per capita income rises.

The second critique is related to economic stability. Prud’homme based his opinion on fiscal policy as a macroeconomic instrument. Fiscal policy, regulating the amount and structure of taxation and expenditure and the management of the budget deficit (or surplus), is a very powerful instrument for stabilizing the economy. It is an instrument that only the central government can manipulate, because local authorities have few or no incentives to undertake economic stabilization policies. If the national government is to use fiscal policies to affect overall demand, however, its share of national taxes and expenditures must be sufficiently large in relation to total taxes and expenditures as well as to GDP. In the case where the proportion of revenues and expenditures controlled by the national government in decentralized systems is not significant enough, fiscal policy implemented in order to stabilize economy will not run effectively.

The third critique of fiscal federalism is related to efficiency. The argument here is that the inhabitants of the different jurisdictions have different needs and expectations. Decentralized provision will make it possible to give the residents what they want, will better match demand, and will therefore increase welfare. Prud’homme criticized this model on two grounds. First, it assumes hypotheses that are very unlikely to be met in a developing country. Second, it focuses entirely on demand efficiency and ignores supply efficiency (Prud'homme, 1995).

Another penetrating critique of fiscal federalism comes from de Rugy (2010), who stated that the current condition in United States represents “the death of fiscal federalism" (de Rugy, 2010, p. 18). According to de Rugy, fiscal power has become increasingly centralized. The US federal government has taken over more and more state functions, largely through grants to state and local governments. Total grant outlays increased from $285 billion in the fiscal year 2000 to $493 billion in fiscal year 2010: a 73% increase. The same pattern can be seen in the total number of federal grant programs. According to data computed by the Cato Institute's Chris Edwards, as cited by de Rugy, in 1980 there were 434 federal grant programs for state and local governments, and in 2006 there were 814. De Rugy also contended that in theory, fiscal federalism is a great weapon to hold the state and local governments in line. In practice, such role of fiscal federalism hardly exists. According to de Rugy, to bringing it back would require radical decentralization of the government's power to tax and to spend, abolishing national income tax altogether and ending federal grants to state and local governments (de Rugy, 2010). This last critique shows that implementation of pure fiscal decentralization needs effort, not only in developing countries that are unlikely to meet its preconditions, as in Prud'homme's claims, but also in developed countries, such as the United States.

2.2.2 Decentralization debates

However, fiscal federalism and decentralization are international phenomenon. Debates on them flourish and enrich the knowledge and understanding on these topics. As mentioned earlier, there is a range of views on the relation with governance, politics and democracy, decentralisation mechanisms, and impact on state economy, and other areas of government activities. The following discussion will explore some of these debates beginning first with the work of Bannink and Ossewaarde (2012).

Bannink and Ossewaarde (2012) using a case study approach explored decentralization in the context of governance and administrative responsibility. They proposed a model of 'transition modes' that describe forms of sovereignty transition as 'modes of governance'. They also explained those modes in term of administrative responsibility, where there are four different types of responsibility (Bannink & Ossewaarde, 2012, p. 596). Firstly, they referred to responsibility as capacity in 'holding sovereign power to effectuate the policy objectives of the sovereign state'. With decentralization they suggest 'capacity is shared between the central and decentralized level of governance system' (Bannink & Ossewaarde, 2012, p. 600).

Secondly, they described responsibility as 'accountability'. They explained that regulated actors have to be responsible for the consequences of the choices that they make. This responsibility is aligned with the ideology of market capitalism and freedom of choice, and developed as a joint arrangement between central government and local government.

Thirdly, Bannink and Ossewaarde described responsibility as the 'delegation of responsibility or task'. This responsibility refers to duties or obligations that follow and competencies that are needed to implement autonomy. Fourthly, responsibility takes place in 'full transfer of policy capacity to decentralized level' (2012, p. 601). This type of responsibility is exercised by a subsidiary state, not within a sovereign state. In a subsidiary state, the central government has a role as a higher authority that assists decentralized actors in support of their self-government (Bannink & Ossewaarde, 2012). Furthermore, Bannink and Ossewaarde argued that

> In the sovereign state, decentralization implies the delegation of centralized power to lower levels of sovereign power. This power shift takes place within the government, which implies that the sovereign keeps its power but transfers responsibilities to enhance its efficacy (Bannink & Ossewaarde, 2012, p. 601).

Bannink and Ossewaarde (2012) proposed three mechanisms of decentralization relating to policy autonomy and their decentralization paradoxes. First of all, decentralization is observed as a 'transfer of policy content' from the central to decentralized level marked by policy-making autonomy and discretionary implementation. In this context, 'responsibility as task' (2012, p. 602) is practiced. The decentralized actor conducts his centrally defined role obligations and customises them into local context. However, resource risks remain at the central level. It is aimed at the increased utilization of local information and may lead to what they term a 'self-regulation paradox' (2012, P. 604). Local level tends to over-emphasize local issue at the cost of central level concerns. The second mechanism of decentralization is as 'transferral of policy resources' (2012, p. 602). This mechanism includes decentralization of financial and other risks of policy failure and success from the central to decentralized levels. This mechanism represents 'responsibility as accountability' (2012, p. 602), since decentralized actors become responsible for achievement of specified policy goals that are formulated at higher level. The mechanism may trigger a 'performance paradox' (2012, p. 604). As they explain these, a paradox may occur when the central level develops instruments of incentives on specified decentralized tasks, which can lead the local to focus efforts on central-level policy aims, and underutilize local expertise and information. The third mechanism of decentralization transfers both 'substantial and resource competencies,' including policy-making autonomy, to decentralized levels. It shows the practice of responsibility as a 'virtue', and a 'subsidiary constellation' is pursued (2012, p. 602). However, they contend this mechanism may trigger 'subsidiarity paradox' (2012, p. 604). It can transfer the central level conflict to the decentralized levels (Bannink & Ossewaarde, 2012).

In his Latin America case study, Garman, Haggard, and Willis (2001) explored a theory of fiscal federalism that focuses on political relationships among politicians at different levels of government. They revealed that the relations are complex and involve wide range of issues, such as institutional and electoral interdependencies, and political, economic, and military interactions. According to Garman, Haggard, and Willis, 'lines of accountability in political parties play a role in structuring the incentives of executives, legislators, and governors with respect to intergovernmental fiscal relations' (Garman et al., 2001, p. 234). They also demonstrated that more centralized party systems were associated with more centralized fiscal structure, and contributed to more gradual and limited decentralization process. Further, they also argued that significant role of local politicians within parties generated increased pressure to decentralize (Garman et al., 2001).

Weingast (2014) also explored political and economic aspects of decentralization in his survey of a range of second-generation fiscal federalism research. According to Weingast, 'predatory central governments' are common problems throughout developing countries. A predatory central government obstructs the operation of a well-designed federal system, and can reverse the benefits of decentralization (Weingast, 2014, p. 20). The problem is compounded by existence of perpetuity and credible commitment issues. Based on China's case of decentralization, Weingast argued that the implementation of decentralization, as a form of institutional and policy reform, may overcome the 'predatory problem'. However, it needs the devolving of real policy and fiscal authority to subnational governments (Weingast, 2014).

Further, Weingast explores interactions between democracy and decentralization. Democracy is considered as the most ‘celebrated form of governance and political accountability’ that allow citizens influence their own destiny by electing one set of officials instead of another (Weingast, 2014, p. 17). However, according to Weingast, decentralization bears the ‘cost of democracy’ and has to satisfy the conditions that limit the stakes of power through constitutions and other institutions for protecting citizen rights. Considering limitations of democracy, decentralization may provide alternative solution by initiating democracy at the local level rather than national level. The strategy offers some benefits. First, ‘sequential democratization process that started at local level is an alternative to an unstable one at the national level’ (Weingast, 2014, p. 19). It is less threatening and therefore may face less resistance in case of authoritarian regimes. Second, decentralization provides the limit condition that involves party politics in another way. In election contexts, decentralization reduces the magnitude of incumbents’ losing since they still can maintain a local power base, and remain politically visible. From local effort the losers can prepare attempts to recapture national power. However, it will be different if it occurs in centralized state. The losing will be too costly for incumbents (Weingast, 2014).

Third, decentralization, in some cases, assists central government keep divided societies living in harmony by decentralizing authority to regions with more homogenous populations. Fourth, decentralization, in democratic contexts, provides the arena ‘to help incubate candidate for national office’ (Weingast, 2014, p. 19). The national voter will elect based on local track records. Indonesia’s case is one of the best examples. The current Indonesia President, Joko Widodo, started his political career at the local level as a mayor of a city, then he was elected as governor of Indonesia’s capital, Jakarta Region. His experiences at local and provincial level escorted him to election as President of Indonesia.

As described previously, Weingast (2014) analysed the relationship between decentralization and democracy, and how decentralization provides benefits to democracy. Faguet in his study (2014) analysed effects of decentralization on governance that involved political matters and described theoretical arguments for decentralization implementation. According to Faguet (2014, p. 2), it will improve the ‘accountability and responsiveness of government’ by changing its structure to increase ‘citizen voice and change incentives’ for public officials. Faguet also identified some theoretical arguments for decentralization programs, such as

> (a) it will improve the accountability and responsiveness of government by altering its structures so as to increase citizen voice and change the deep incentives that public officials face, (b) reduce abuses of power by transferring certain central government functions and resources to lower level, (c) improve political stability by giving aggrieved minorities control over substantial governments with limited power over issues that affect them directly, and (d) increase political competition by creating many smaller arenas that politicians vie to control (Faguet, 2014, p. 2).

Furthermore, as highlighted by Faguet, decentralization initiatives across rich and poor countries are mainly motivated by goals to improve governance, or in other word, 'better governance is the single biggest theoretical justification for decentralization' (Faguet, 2014, p. 10). Faguet provides some empirical proofs from some decentralization cases, such as Brazil, Columbia, and Mexico. In Brazil, he found a match between public investment and citizen wishes and decreasing rates of infant mortality. In the case of Colombia, he identified that how decentralization is carried out influences decentralization effectiveness. This was also the case in Mexico. Summing up, Faguet argued that successful decentralization is attained through 'mechanism of higher civic engagement and better governance' (Faguet, 2014, p. 10).

Further, the positive impacts of decentralization on economic conditions is also suggested theoretically as a reason for the adoption of decentralization across the world. These impacts include economic growth through the efficiency of a decentralized provision of public services, and the ability of the political system to innovate and carry out reforms. However, other studies demonstrated that decentralization increases corruption, and government inefficiency, and thus diminished growth (Baskaran, Feld, & Schnellenbach, 2016). In the context of economic growth, Baskaran and Fled argued that fiscal decentralization may lead to higher economic growth rates, since subnational fiscal autonomy improve efficient allocative outcomes (Baskaran & Feld, 2013). The proposition is in line with Lightart and Oudhesden's (2012) study. However this claim is contested. Vazques and McNab (2003) argued that overall impact of fiscal decentralization on economic growth may be uncertain, in terms of the specific and aggregate effects of decentralization on growth, equity, and macroeconomic stability (Martinez-Vazquez & McNab, 2003).

Soejoto et.al. in a study of decentralization effects on OECD countries suggested that there is little evidence of a direct relationship between fiscal decentralization and economic growth. Another study on OECD countries indicated that '…decentralization does not lead to more economic growth. In fact, it might even depress growth rate' (Baskaran & Feld, 2013, p. 440). However, Baskaran and Fled, based on other research, suggested that fiscal decentralization could be beneficial, in term of lower inflation, fiscal stability, higher life satisfaction, and disincentive against terrorism (Baskaran & Feld, 2013). In their most recent study, Baskaran, Fled, and Schellenbach (2016) reviewed theoretical and empirical studies on decentralization and conducted a meta-analysis of estimated effects. They concluded that 'no final agreement can be reached regarding the impact of decentralization on economic growth without consensus as to how to measure decentralization in the first place' (Baskaran et al., 2016, p. 1462).

Whilst the impact of decentralization on economic growth is uncertain, there is evidence of its effects on other area, such as health and education services. Health and education are reflected in the millennium development goals, and have a vital impact on the quality of life, and to ensure greater opportunities for individuals, since they encourage better quality of human capital (I. Ahmad, 2016). Decentralization provides positive influence on the effectiveness of public policy in health service area. According to a case study conducted by Cavalieri and Ferrante (2016) about Italian decentralization, higher autonomy in the allocation of tax revenue or a lower dependence from central government transfer, which represents fiscal decentralization, has a positive effect on reducing infant mortality rates (Cavalieri & Ferrante, 2016). The result is consistent with other empirical evidence of developed countries facing similar decentralization process. Based on his study on 20 OECD countries, Rubio (2011) argued that fiscal decentralization has positive and important effects on effectiveness of public policy, in term of the reducing infant mortality rates (Rubio, 2011). Other decentralization impact studies also demonstrated that the positive effects of decentralization on health care, especially in reducing infant mortality rate, occurred in developing countries, such as China (Uchimura & Jütting, 2009) and Colombia (Soto, Farfan, & Lorant, 2012).

Furthermore there are empirical studies that reveal that decentralization influences education services in positive term, similar to health care services. Faguet and Sanchez (2008) demonstrated that in Bolivia, public investment in education became more responsive to local needs. Further they identified improvement in enrolment rates in public schools after decentralization in Colombia. Decentralization in both countries, Bolivia and Colombia, delivered shifting public investment patterns in primary social services, such as education. It was triggered by changes of the smallest, poorest, and most rural municipalities' behaviours since 'decentralization empowered them disproportionately, and their collective action altered national investment patterns' (Faguet & Sánchez, 2008, p. 1311).

The above study findings were confirmed by Ahmad's study (2016) across 62 countries, a mix of OECD and non-OECD countries. Relating to decentralization, Ahmad argued that total revenue of local subnational government has a positive impact on education. However, there was a relationship between the source of financing, such as central government transfers, and different results of education spending. They write, 'When subnational governments are financed by own-tax revenues, they are more efficient and likely to increase education spending to enhance school enrolment' (I. Ahmad, 2016, p. 80). Further, Do Vale (2016), based on his study on education reform and decentralization in Brazil, South Africa, South Korea, and Spain, argued that decentralization in education area provides different result among countries. The empirical evidences demonstrated that 'South Korea became one of the best performing countries in the world in term of pupils' numeric and scientific skills, and on other hand, Brazil, South Africa, and Spain generally speaking have shown little progress in term of quality of learning' (Do Vale, 2016, p. 609). This reveals that decentralization does not always produce homogenous results, since governance and structure of each country may lead to different stances (Do Vale, 2016).

2.2.3 Summary lessons

From the above discussion about decentralization and fiscal federalism, we can derive important lessons. The theory of fiscal federalism establishes a framework for understanding the structures of governments, especially in public finance matters. However, understanding and implementation of this theory is not straight-forward. It needs adjustment according to real conditions, contexts and historical backgrounds. The above analyses and critiques of fiscal federalism and decentralization can inform analysis of Indonesia's decentralization. Whilst there is theoretical and empirical evidence supportive of decentralization, the impacts of decentralization vary across countries. While there is inconclusive evidence about the impact of decentralization on economic growth, many studies reveal a positive effect on health and education. However, opposite results are also derived, and the studies suggest that decentralization implementation should consider a country's specific conditions. It demonstrates that decentralization is not 'one recipe for all' for public sector problems. For Indonesia circumstances, in order to gain maximal benefits from decentralization, adjustments need to be made to take into account Indonesia's specific conditions, and critiques and weaknesses of decentralization itself should be considered.

2.3 Decentralization in Indonesia

The current decentralization signifies a milestone in the reform of Indonesia's public governance. However, aspects of decentralization began prior to the implementation of the current set of autonomy laws passed in 1999. The discussion below is organized into two subsections: decentralization under Law Number 5/1974 (period of 1974 until enactment of autonomy laws in 1999) and decentralization under Laws Number 22/1999 and 25/1999 (since 1999 onwards). The discussion describes two periods of decentralization in Indonesia and provides a backdrop for further discussion regarding local government finance.

2.3.1 Decentralization under Law Number 5/1974

Smoke and Lewis (1996) explored decentralization in an examination of Law Number 5/1974 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. Furthermore, authority to raise revenue and provide services was assigned to central government agencies, but certain functions were the responsibility of local government. In this era of decentralization, local government, as an administrative subsidiary of the central government and a 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 & Lewis, 1996). Furthermore, Beier and Ferrazzi (1998) recognized that the relationship between local government and central government agencies was arranged based on three principles of governance (decentralization or devolution, de-concentration, and co-administration) that were enacted by law 5/1974. The de-concentration mechanism was extensively used, with most departments extending representative offices down to the local government jurisdiction (Beier & Ferrazzi, 1998).

Smoke and Lewis also argued that there was no clear division of service functions among levels of government in Indonesia during this era of decentralization. Many types of services in local government involved higher levels of government in planning, design, finance and delivery. Although local services, such as urban water supplies, solid waste management, and local road development, were the responsibility of a local government, involvement of central government ministries and their representative office was a typical arrangement in this era. This situation could be understood because 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. According to Smoke and Lewis, in this period, decentralization was conducted by program initiatives undertaken by various ministries such as the Integrated Urban Infrastructure Development Program (Smoke & Lewis, 1996). According to the studies above, there is a clear proposition that Indonesian decentralization in this era was initiated by central government agencies guided by general features in Law 5/1974.

2.3.2 Decentralization under Law 22/1999 and 25/1999

Since enactment of autonomy laws in 1999, there have been new provisions in regulation regarding financial matters, such as local revenues, expenditure, and central–local financial relations, and these have widened the scope of local government authority in managing its own finances. This section will discuss studies relating to the new decentralization in Indonesia, providing context for discussion of risk and risk management in this area. Decentralization in Indonesia has conducted through political, administrative, and fiscal decentralization.

As stated earlier, with the implementation of Law 22/1999 and their revision Law 32/2004, Indonesia has been transformed into a mostly decentralized country (Shah et al., 2012). The decentralization process in Indonesia was conducted through symmetrical and asymmetrical decentralization. Symmetrical decentralization assumes that all provinces (and local regions) have the same conditions, and central government allocates equal autonomy to all lower level units in conducting the various decentralised roles and functions. This symmetrical decentralization is implemented in most areas of Indonesia. Asymmetrical decentralization considers level of variations and differences among provinces and local regions, and implements different levels of autonomy among provinces and regions. Decentralization of Papua Province is example of the asymmetric decentralization (Nasution, 2016). The similar cases occur in four other provinces: West Papua, Aceh, Jakarta and Yogyakarta (Ostwald, Tajima, & Samphantharak, 2016).

In term of political decentralization, local legislators at provincial level (*Dewan Perakilan Rakyat Daerah Provinsi, DPRD Provinsi*) and at local level (*Dewan Perwakilan Rakyat Daerah Kabupaten/Kota, DPRD Kabupaten Kota*) are directly elected. The law also made provisions for the selection of governors (of provinces) and regents or mayors (of regencies or cities) through popular regional elections (Lewis, 2005). However, five provinces have been granted with special autonomy. Province of Aceh is approved as having special autonomy, in term of the Sharia law adoption (Islamic-based law), establishment of Aceh-based local political parties, the usage of a provincial flag, and the right to a larger proportion of revenues from natural resources. The Province of Papua and West Papua, are also granted special autonomy, involving the usage of provincial flag, to organize a local police, a requirement that governor be of a local origin, and the right to a larger proportion of revenues from natural resources. In the Jakarta Capital Region (*Daerah Khusus Ibukota Jakarta, DKI Jakarta*), the governor has exceptional authority over the local government to facilitate coordination. DKI Jakarta consists of five administrative districts that do not have autonomy like other districts in Indonesia. Last of all, in keeping with the existence of the Yogyakarta Sultanate for centuries, Yogyakarta Special Region is granted special autonomy, including appointment the Sultan of Yogyakarta as the governor without popular election (Ostwald et al., 2016).

Lewis (2005) contends that this recent legislation eliminated the de-concentrated agencies of central government. In addition, the hierarchical relationship between provincial and local governments was abolished. Further, according to Ostwald, Tajima, and Samphantharak, Law 22/1999 and its amendment Law 32/2004, devolve a significant portion of government function to regional levels. The laws specified several public service responsibilities at district level, including the provision of health, education, infrastructure and environmental management. In this decentralization arrangement, provinces have limited power and responsibilities. Their roles are '…as backstops for districts that were unable to execute their responsibilities, to facilitate the coordination between districts, and to a limited range of province-level services, including provincial hospitals, provincial road, and special education facilities' (Ostwald et al., 2016, p. 146). The laws also granted districts significant organizational autonomy, involving the right to hire and fire civil servants (Ostwald et al., 2016).

However, the current amendment Law 23/2014, shifts several powers back to provincial and central level, including responsibilities for several types of natural resources, the central authority to dismiss district level heads and strengthening the mandate of central government to set standards in areas like labour and healthcare. According to Ostwald et al. (2016), the new arrangements should not be viewed as a recentralization process. They are the attempts to rectify the lack of middle authority, between the central government and local government, as introduced by Law 22/1999 and 32/2004. The old laws create powerful districts, but reduce provinces of nearly all power, despite the need for provinces to assist in monitoring and coordinating. Ostwald et al suggest that without enough power, provinces are unable to conduct effective coordination, and it may drive to high transaction cost (Ostwald et al., 2016).

In relation to fiscal decentralization, the subnational government received more discretion over budgetary allocation, and thereby gaining autonomy over service delivery. Further a larger share of total government resources went to the subnational regions. The subnational proportion of public spending increased from only 17% in 2000 to 40% in 2010 (Ostwald et al., 2016). However, Lewis (2005) noted that major tax bases remain under the authority of the central government. Lewis also demonstrated that local government's right to create new revenue bases (taxes and charges) have not significantly changed from previous periods. Tax bases are defined by the central government and local governments have limited authority to set rates below ceilings set by the central government. The new provisions in the current decentralization era, according to Lewis, allow local governments to create their own taxes and charges through local regulation within central government guidelines and approval (Lewis, 2005). However, as Ostwald et al argue, 'few legally recognized options existed for the regions to raise revenue locally through taxation. This has left the regions reliant on the centre to fund budgets' (Ostwald et al., 2016, p. 147). In short, Indonesia decentralization is essentially political and administrative decentralization (Green, 2005).

Lewis also noted changes in intergovernmental transfers and grants. According to Lewis, the system of intergovernmental transfers has been significantly restructured and expanded. Subnational governments now gain greater access to significant amounts of natural resource revenue and taxes. 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. These 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 Transfer and the Special Purpose Grant, replacing the previous Autonomous Region Subsides and Presidential Instruction Grants (Lewis, 2005).

Decentralization means that many functions of government should be carried out at the local government level (Alm, Aten, & Bahl, 2001). It was followed by reassigning two-thirds of civil servants and more than 16,000 facilities from central to local government (Asian Development Bank, 2012), and a significant devolution of spending responsibility to subnational governments, at the district level. Lewis and Oosterman noted that by the end of 2007, 38% of total public sector expenditure and 8% of total public revenue were accounted for by subnational governments (Lewis & Oosterman, 2009). This demonstrates decentralization mostly on the expenditure side, whereas public revenue in general is still under central government controls.

2.3.3 Impacts of decentralization in Indonesia

The previous section describes the impacts of decentralization based on experiences from across the world. In current section, Indonesia's experiences are explored based on some studies. It is important since Indonesian decentralization is one of the most massive decentralization adoptions in the world. Pepinsky and Wihardja (2011) explored the effects of the decentralization on Indonesia's economic performance. Their study was based on assumption that the decentralization actually increases allocative efficiency, and then in turn, allocative efficiency promotes economic growth. They did not find positive impacts of the decentralization on Indonesia development, as there was absence of two mechanisms: 'competition for productive resources across districts, and political competition within districts'. They also argued that a country must have 'relatively homogenous regions, highly mobile labour and capital, and strong accountability for local leader' for gaining national development enhancement from decentralization. Indonesia experienced absence of these factors(Pepinsky & Wihardja, 2011, p. 365).

In line with previous studies, Soejoto, Subroto, and Suyanto examined the impact of decentralization on Indonesia human development. They argued that decentralization funds may influence human development index (HDI) through two channel: public expenditure and economic growth. They found that an increase of decentralization fund (a form of fiscal decentralization) was not significantly increasing economic growth. Rather they argued that increased decentralization fund was still more widely used for personnel expenditure, business travel, and government administration (Soejoto, Subroto, & Suyanto, 2015). Further, limited impacts of Indonesia decentralization on economic development is caused by insufficient effort to build local capacity in economic development planning, and the incentive to focus on licensing related fee collection for local revenue generation, rather than on growth (Ostwald et al., 2016). However, decentralization increases the responsiveness of Indonesia local government to local public infrastructure needs through raising public expenditure, especially in health and physical infrastructure (Kis-Katos & Sjahrir, 2017; Soejoto et al., 2015).

As previously described, decentralization involves devolution of some functions and responsibilities to local government, including provisions of education, health, infrastructure, and environmental management. Many studies explored these topics for revealing impacts of Indonesia decentralization. Indonesian decentralization seems to improve education service delivery significantly as represented by improvement in literacy rates, years of school, and dropout rates for primary and secondary education. Decentralization also leads to higher rates of satisfaction with education services (Simatupang, 2009; Widyanti & Suryahadi, 2008). However, there are some areas that need improvement, such as 'student learning achievement, teacher's attention to their students, affordability of the cost of education services, and condition of school building and facilities' (Widyanti & Suryahadi, 2008, p. 54). In line with Kis-Katos and Sjahrir's study, there is no significant increase in local public investment in education expenditure after decentralization was enacted in Indonesia (Kis-Katos & Sjahrir, 2017).

Positive impacts of decentralization on health services in Indonesia were identified by some studies. According to Simatupang (2009), generally there is significant improvement in mortality related measures, such as under five mortality rates and life expectancy at birth (Simatupang, 2009). The overall assessment of health service is also positive represented by high rates of satisfaction (Widyanti & Suryahadi, 2008). However, there is a gap on health service achievement between some areas in Indonesia after decentralization. In term of neonatal mortality, there is geographically disparity between 'the worst performing and best performing groups of islands, and it is projected to reach approximately 24 deaths per 1,000 live births' (Hodge, Firth, Jimenez-Soto, & Trisnantoro, 2015, p. 1648). Furthermore, there is a decrease in other indicators such as 'health service utilization rate, labour attended by medical worker, immunization coverage, and contraceptive usage' (Simatupang, 2009, p. 85).

In line with Simatupang's findings, Heywood and Harahap, based on information collected in 15 district in Indonesia, identified that there has been only little improvement in health services (Heywood & Harahap, 2009). The contradictory results in health service delivery may be triggered by uneven distribution of health service, and work force capacity and quality of care, especially in rural and remote areas (Diana, Hollingworth, & Marks, 2015; Simatupang, 2009). Considering the weaknesses of decentralization in health service delivery, Widyanti and Suryahadi suggested some aspects of health services that need improvement, such as 'availability of medicines and vaccine stock, affordability of medical services, the physical condition of health services location, the attention and caring attitude of medical personnel, and waiting time at health service providers' (Widyanti & Suryahadi, 2008, p. 112).

Regarding public good provision, Chowdhury, Yamauchi and Dewina (2009) explored the effect of decentralization on a range of public good provision, involving roads, streetlights, and education and health infrastructure. They found that Indonesia decentralization has improved the availability of local infrastructure, and has led to a convergence of public good provisions, across both poor and rich regions (Chowdhury, Yamauchi, & Dewina, 2009). Further, decentralization provides greater decision-making power to local governments, and that its impact on public good provision should depend on the quality and nature of local institutions. As identified by Pal and Wahhaj (2016), in communities which had both a tradition of democracy and adhered to traditional law, fiscal decentralization led to '…a sharp increasing in investment, and led to a shift public spending towards investment in social good (health and education provisions) with no significant change in the share going into investment in communication and road infrastructures' (Pal & Wahhaj, 2017, p. 405). However, poor infrastructure has been consistently identified as one of major obstacles of Indonesia's development (Ostwald et al., 2016). Regarding the relation between decentralization and infrastructure development, Patunru and Rahman argued that administrative decentralization and tension to secure votes during electoral cycles combined to shorten the time-horizon for expenditure which have particularly adverse effects on infrastructure investment in decentralized Indonesia (Patunru & Erman, 2013).

While environmental matters are parts of sustainability development goals, some studies argued that decentralization in Indonesia has negative impacts on environment. Decentralization era does not provide significant positive effects on the forest sector, similar to the previous centralized regime (Palmer & Engel, 2007). Further, Burgess at al. (2012) used satellite imaging on Indonesian forests to estimate rate deforestation, which they linked to incentives of local bureaucrats and politicians. They found a positive correlation between the number of jurisdiction and deforestation. Furthermore, they suggested that the rate of illegal logging increased with proximity to election in Indonesia (Burgess, Hansen, Olken, Potapov, & Sieber, 2012). Further, Bedner (2010) explored relations between decentralization, and Environmental Impact Assessment and enforcement of water pollution law. Though there is evidence of greater responsiveness by decentralization districts and provinces following cases of water pollution through direct citizens' action or legal action, Bedner (2010) argued that there are serious environmental problems that certainly are linked to decentralization. Relating to the problems, some factors were identified, including 'unaccountability and/or capture, problems of trans boundary pollution, not making the environment a priority, or not having the capacity to effectively carry out environmental tasks' (Bedner, 2010, p. 55).

2.3.4 Summary

We may note some important points in the above discussion. The processes that have been operating in Indonesia are clearly not pure decentralization as described in the fiscal federalism literature. Though local governments have enough autonomy in disbursing their 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, whereas there are some improvements on service delivery enabled by the new decentralization in Indonesia, there has been a repeat of conditions that were evident under the old decentralization of Law Number 5/1974.

This kind of decentralization may be suitable given the Indonesian context. Indonesian development policies have concentrated on centres that were expected to spread economic growth to their surrounding areas through a trickle-down-effect. Unfortunately, Anwar (2005) noted, as cited in Pribadi, Putra, and Rustiadi (2015), that there have been increasing regional disparities between Java and outside Java, between urban and rural areas, and between the east and west of Indonesia (Pribadi, Putra, & Rustiadi, 2015). Indonesia also has relatively severe disparity in provincial income per capita (Resosudarmo, 2006). In the context of local government finance, there is a wide gap across the local revenues of local governments. For example, according to 2014 budget data, Surabaya City (a large city located in Java) received local revenue amounting to IDR 2,953,981 million which equates to 50.83% of its total revenue. In contrast, Pegunungan Arfak Regency (established in 2013 in the West Papua province, i.e., outside of Java and in the west of Indonesia) received local revenues amounting to only IDR 20 million, equating to 0.01% of its total revenue (Ministry of Finance, 2014). Therefore, the current central government role in revenue allocation for local governments might be suitable for diminishing gaps among local governments and responding to issues of equity. However, this claim needs further exploration.

The literature suggests that Indonesia is firmly on the road to decentralization. To succeed in these processes, requires the meeting of key criteria, including financial resources controlled by local government to provide public services, implementation accountability and transparency mechanisms, and effective legal systems in order to facilitate decentralization (Green, 2005). Accountability mechanisms include those able to promote good governance and achieving decentralization objectives, such as risk management system. Against this backdrop, I now turn to consider in more detail risk management systems in the public sector.

2.4 Concepts and Understandings of Risk

The preceding sections have discussed literature on previous and current Indonesian decentralization and positions in decentralization and fiscal federalism debates. Further, Chapter 1 has noted that the process of change in decentralization created problems in post-decentralization Indonesia. It also demonstrated uncertainty in achievement of objectives that can be inferred to result in increasing risk exposure in local government. Therefore, the central question of this thesis is how Indonesian local authorities might manage risk to better achieve financial and non-financial objectives. This section presents discussion of risk and risk management derived from the literature, especially from an Asian perspective, and how Indonesia currently fits into this landscape.

2.4.1 Concepts of risk

The central concept of risk is not a new idea. Before it was adopted in social and public policy, the fields of finance, environment, health, and security analysis identified risk as a part of their business operations. Risk is associated with uncertainty. Risk, in daily usage, refers to "loss, injury, destruction, hazard, vulnerability and danger" (Chan et al., 2010, p. 1). However, there is a difference between risk and danger. As suggested by Garland, danger is the negative state or impact (harm, injury, adversity) of an event, whereas risk is likelihood of such negative states (Garland, 2003). So, risk is about the possibility or not of an event occurring. The concept of probability is one way for calculating likely risk. Statistically, probability is represented on a scale ranging from 0.0 (no chance of an event occurring) to 1.0 (certainty of the event occurring) (Woods & Kettles, 2009). Beck (2006) argued that risk does not mean catastrophe, but the anticipation of catastrophe. According to Beck (2006, p. 332), "risks exist in a permanent state of virtuality, and become topical only to the extent that they are anticipated." Catastrophe is the real form of the risk. Furthermore, "without techniques of visualization, without symbolic form, without mass media, etc., risks are nothing at all" (Beck, 2006, p. 332).

The Australia/New Zealand Risk Management Standard (AS/NZS 4360:2004) defines risk as "the chance of something happening that will have an impact upon predefined objectives." Risk is measured in terms of consequences and likelihood. Likelihood is used as a general description of probability or frequency (Standards

Australia International Limited, 2004). Similarly, the International Organization for Standardization's (ISO) Standard on Risk Management (ISO 31000:2009) defines risk as "the effect of uncertainty on objectives" (ISO, 2009, p. 1). Furthermore, ISO provides definitions of effect, likelihood, probability, and uncertainty. An effect is a deviation from the expected (positive and/or negative) course of action. Risk is often expressed in terms of a combination of the consequences of an event and the associated likelihood of occurrence. ISO defines likelihood as the chance of something happening, whether defined, measured, or determined objectively or subjectively, quantitatively or qualitatively, and described using general or mathematical terms (such as a probability or a frequency over a given time period). Probability is defined as a measure of the chance of an occurrence expressed as a number between 0.0 and 1.0, and it align to Woods and Kettles' description as mention earlier. Uncertainty is considered the state, even partial, of deficiency of information related to the understanding or knowledge of an event and its consequences and likelihood (ISO, 2009).

There are some critiques of ISO's terminology of risk. Aven (2011) stated that ISO's definition of risk is not sufficiently precise and would lead to numerous different interpretations. According to Aven, it is possible to build a risk framework for research and management based on these definitions, but compared to common terminology, they lead to conceptual difficulties that are mismatched with the daily use of risk in most fields (Aven, 2011). Therefore Aven and Renn proposed a definition of risk as "uncertainty about, and the severity of the consequences of, an activity" (Aven & Renn, 2009, p. 720). Furthermore, ISO defines likelihood as the chance of something happening, but Aven contends that the term "chance" is not defined by the ISO but suggests that chance is the same as probability. Relating to ISO's definition of probability, Aven states that often such probabilities are mixed with frequentist probabilities. According to Aven, frequentist probability is not a measure of the assessor's uncertainty. Therefore Aven proposes a definition of probability as a measure for representing or expressing uncertainty following the rules of probability calculus (Aven, 2011).

In regard to risk definition, some scholars describe risk in negative terms, such as the probability of a negative event (Hermansson & Hansson, 2007), the quantifiable likelihood of loss or less than expected return (McNeil, Frey, & Embrechts, 2005), and the probability and magnitude of a loss, disaster or other undesirable event (Hubbard, 2009). However, there are upside aspects of risk. According to the ISO's definition, because of uncertainty, risk can result in positive, negative, or neutral events. Similarly, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) states that events can have negative impact, positive impact, or both. Events with a negative impact represent certain risks, which can prevent value creation or erode existing value. Events with positive impact may offset negative impacts or represent opportunities. Opportunities are the possibility that an event will occur and positively affect the achievement of objectives, supporting value creation or preservation (COSO, 2004a).

2.4.2 Understanding and analyzing risk

As the literature has expanded there has been an evolution in understanding of risk. Previously, risk was treated as a circumstance that could be approached objectively and studied by scientists and managers who had expertise in the area. More recently, according to Chan and colleagues, risk has been understood as a result of learning processes through interactions with the objective environment and can be socially constructed. Therefore, risk perception can be subjectively biased, selective and organized depending on context and past experiences (Chan et al., 2010). Further, Slovic (1992), as cited in Chan et.al. (2010), has argued that risk is affected by "perceived sense of control, value system, and the prevalence of incident" (Chan et al., 2010, p. 2). Furthermore, Douglas and Wildavsky (1983) proposed that people in different social organizations or cultures prioritize risks differently and find different levels of risk acceptable depending on the social norms of the group. Therefore, the perception of risk is not merely technical, but social or political (Douglas & Wildavsky, 1983). Aligning with this discussion, Beck suggested that "risk is not reducible to the product of probability of occurrence, multiplied with the intensity and scope of potential harm" (Beck, 2006, p. 333). According to Beck, risk is "a socially constructed phenomenon, in which some people have a greater capacity to define risks than others". Beck further proposed, in the context of world risk society, that risk definition is a power game, where Western governments or powerful nations define the risks for others (Beck, 2006, p. 333).

Despite these analyses, modern risk analysis is mostly based on quantitative methodologies that characterize risk as product of probability and severity known as probabilistic risk analysis (PRA) (Hermansson & Hansson, 2007). Put simply, this tool quantifies risk as a calculation of the probability (p) of a negative event and the severity (u) of its impacts *(p x u)*. According to Hermansson and Hansson (2007), one advantage of PRA is that it can be combined with economic analysis in the form of risk–benefit analysis. However, in a decision-making context, PRA does not address all information that may be needed. For instance, ethical aspects are not included in this type of analysis. Hence, Hermansson and Hansson have proposed a three-party model. This model is based on three roles or parties that involved in risk analysis: the risk-exposed, the decision-maker, and the beneficiary. These scholars have advised that the relationship between these roles is important for identifying the difficult, ethical parts of risk management. Ethical aspects are usually not included in quantitative analysis. Therefore, ethical analysis can help humanize risk management by making risk analysis not only about numbers or value for money but also about people (Hermansson & Hansson, 2007).

This is aligned with Beck's proposition that risk implicitly involves a hidden politics, ethics and morality. Beck has proposed a theory of world risk society in which modern societies are formed by new characteristics of risk that are global in anticipation and catastrophe. According to Beck (2006), perceptions of global risk are described by three characteristics: delocalization, incalculableness and non-compensability. Causes and consequences of global risks exist beyond state borders and are widespread across the world. The impacts of the risks are, in principle, incalculable and not compensable. This theory underlines the changes of perception on the role of some key modern institutions. Previously, institutions such as the state, business, and the military were seen as instruments of risk management, but recently they have also been considered sources of risk. Beck argues that the world risk society suggests a new type of individualization and lines of conflict. The individual has to face the uncertainty of global risk by him or herself because of the degradation of key institutional roles in risk management. The individual cannot rely anymore on his or her expertise in rationally defining and controlling risks. Further, the conflicts in the global society are cultural ones. Cultural perception assumes a key significance in defining and controlling global risk in the world risk society. These characteristics intensify complexity of the problems and scope of the effect of risks in world risk society (Beck, 2006).

Beck's proposition aligns with Power's (2004) work, especially regarding the state as a source of risk. According to Power, the concept of risk entered the public sector management paradigm and became an organizing concept as never before. Risk emerged as the basis for "self-challenging management practices in the absence of direct competitive pressure" or, in other words, risk is a "new concept for challenging the quality of public services in the absence of real markets," because, substantially, the government does not have competitors in delivering its services (Power, 2004, pp. 13, 19).

Furthermore, Power's ideas in relation to sources of fraud risk support Beck's proposition. Power classified sources of fraud risk into four categories: inside, leadership, organization and outsider. Power has proposed that the employee is the first source of fraud. The second source is the leader that acts in misconduct against the organization, its employees and stakeholders. The third source of risk lies in the organization itself that is used by both leader and employee to commit fraud and misconduct. The fourth source is an outsider where fraud is conducted by other parties against an organization (Power, 2012). All these sources of fraud risk can exist in government institutions. The employee, the leader, the organization itself, and the outsider can be a source of risk. For example, in the case of bribery, the source is not only inside the organization, but also an outside party.

Power identified the insidious nature of risk practices and ideas as the risk management of everything and he introduced reputational risk as a secondary risk. Secondary risk is seen as a repercussion of primary risk. Reputational risk, in the public sector, emerges from the existence of a gap between the public's expectation and actual performance of government and its agencies and, if this risk is ignored, it can escalate into political risk. Existence of reputational risk management reflects real consequences and intensification of the effects of original risks if not explicitly managed. Further, because everything may affect organizational reputation, reputational risk demands the risk management of everything (Power, 2004).

Hutter (2010) argued that, traditionally, risk governance has been carried by the state. The state uses the law as representative of broad decisions about how much uncertainty is acceptable and what levels of risk are tolerable. Risk regulation regimes place emphasis upon rules enacted by the state and backed by administrative or criminal sanction, and the creation of administrative agencies to implement the rules (B. M. Hutter, 2010). This is reminiscent of Beck's world risk society, in which the state is seen as risk management instrument (Beck, 2006).

The growing importance of risk management in risk governance systems has encouraged the introduction of business risk management practices across the public sector. Risk-based tools have been introduced for making policy choices and aiding in decision-making (B. M. Hutter, 2010). Risk-based regulation is a sign of change from the regulatory state into a risk management state (Power, 2004).

However, the risk management paradigm, especially relating to the regime of risk-based regulation, is evolving in new directions. It is characterized by changes of environment where the role of government in many Western countries is less direct and less visible. The risk management paradigm established new sources of regulation, including risk regulation (B. M. Hutter, 2010). According to Hutter (2006), there are two sources of regulation distinct from the state: the economic sector and civil society. In the economic sector, industry or trade organizations and associations, companies such as insurance companies, and other institutions that can influence through their investments and consumer choices are sources of regulation. (B.M. Hutter, 2006; B. M. Hutter, 2010).

Furthermore, Hutter argues that civil society is involved in a range of organizations, especially nongovernmental organizations, that may operate at local, national or international level and that they influence risk management through activism and provision of information (B.M. Hutter, 2006). Some organizations, such as COSO and ISO are good examples for this type of regulation source. COSO and ISO established standards on risk management. The standards are accepted and implemented internationally, beyond the border of states and including the Asia region. Hutter's argument also provides good support for Beck's proposition that in the context of the world risk society, risk and risk management are a global matter, and Western societies define risk for other areas (in this case in managing risk) (Beck, 1999, 2006). Participation of parties other than the state in regulating risk demonstrates the change of risk management approaches from government to governance. There is a high expectation that the state should manage risks, with participation from non-state sectors. Clearly, this increased role for non-state actors will be followed by a change of governance style, including replacement of top-down governing styles with co-operative approaches (Chan et al., 2010).

2.4.3 Asian perspectives on dealing with risk

In the context of world risk society, Beck states that "non-Western societies share with the West not only the space and time, but also—more importantly—the same basic challenges of the second modernity (in different places and with different cultural perceptions)" (Beck, 1999, p. 2). Whereas thought about risk is attending to the global (Beck, 2006), it will be interesting to look at matters from another, Eastern perspective. Some studies explore risk and risk management in specifically Asian circumstances. Wang (2010) reviewed some studies relating to family risks, associated with Beck's reflexive modernity. Reflexive modernity is characterized by an awareness of increasingly uncontrollable side effects of modernization (Beck, 1992). Wang summarized, relating to reflexive modernity, that families in various societies in East Asia face risks that "mainly arise from the difficulty of sustaining the stability and integrity of family in this increasing reflexive and individualized society" (Wang, 2010, p. 107).

Chang reviewed some studies on social risks in East Asia. He suggested four levels of social risk. The first level includes risks in basic social units, such as identity, family and demography. The second level includes risks associated with domestic institutions, such as the labor market, business, and politics. The third level includes risks relating to global changes, such as economic integration and post-industrialization. The fourth level includes risks inherent in system dynamics. Such risks can easily cross borders and extend beyond time limits, and then transform into a complex risk network (Chang, 2010).

Lue discusses risks that accompany compressed modernization processes, in which modernization takes place in a short time. In East Asia, "the risks of poverty due to neo-liberal reform, the risks of natural disaster due to environmental damage and the risks of accidents due to faulty technology" are prevalent (Lue, 2010, p. 223). Facing such risks, the state with regulatory ability should provide safeguards for its citizens. Unfortunately, the state appears to have lost its regulatory capacity in increasingly complex societies. Furthermore, risk refers to a public perception of a global threat.

From the previous discussion, we can see that risk is not just an objective calculation of uncertainty, but a social construction as well. Risk is not just technical matter, but concerns humans themselves. According Chan and colleagues (2010), risk management and regulatory systems are underdeveloped, even in East Asian societies that are relatively developed. Cultural factors, problems of confidence in the state's ability to manage risks and a growing of the middle class are considered to be causes. The concept of risk is less popular among social and public policy analysts in East Asia, where risk is associated with political stability and later with economic uncertainty and vulnerability (Chan et al., 2010). Furthermore, Hutter (2010) identified a paucity of studies about understandings of risk in Asia. However, from the existing studies, he summarized that Asians generally have greater tolerance of risk than their Western counterparts. There is also evidence that the new risks facing Asian societies have triggered some regulatory responses (B. M. Hutter, 2010).

Although Hutter (2010) stated that there is a lack of studies on risk in Asia, there are several studies regarding risk and risk management in Indonesia. Kansal and Suwarno (2010) studied agricultural risk management in an Indonesian irrigation area. In the study, they proposed implementation of risk management for dealing with agricultural risk in irrigation areas. They also suggested the use of human, technological and financial resources in managing agricultural risk, and proposed crop insurance as an alternative for reducing risk impact in agriculture (Kansal & Suwarno, 2010). Pradhan and Prescott (2002) investigated social risk management options for medical care in Indonesia. They concluded that universal coverage for medical care with price intervention regimes as practiced in Indonesia significantly reduced the frequency of catastrophic financial shocks, but did not eliminate them (Pradhan & Prescott, 2002).

Further, Sudirman and Hardjomuljadi identified that construction risks, physical risks and performance risks were the most significant risk categories in Indonesia hydropower construction projects. They also identified six critical initial risk source factors: the subsurface conditions of the geology, subsurface conditions of ground water, third party delay, poor site management and supervision, low speed of decision-making involving all project teams, and delayed site access (Sudirman & Hardjomuljadi, 2011). Addressing natural risk, Hadmoko and colleagues conducted a study on landslide risk in an Indonesia area. They concluded that landslides are a serious problem in Java, particularly in the Menoreh Mountains, and are caused by physical, natural factors. For better risk management, they recommended an efficient landslide risk management system, and coordination among regions and departments concerned, universities, research centers, nongovernmental organizations and local people in landslide prone areas (Hadmoko, Lavigne, Sartohadi, Hadi, & Winaryo, 2010).

Widhyantoro (2009) conducted a study on risk and risk management in an agency of a local government in Indonesia. The study aimed to carry out a risk assessment in a local government agency and to determine the risk treatment of an identified risk. Widhyantoro identified 56 risks in the agency during his study and described five categorized as very high level risks: interest rate risk, improper fixed asset recording risk, liquidity risk, fiscal risk, and improper expenditure recording risk. Risk treatments were proposed (Widhyantoro, 2009). Although Widhyantoro described how to deal with these five identified risks in local government, there is a paucity of studies on how to implement formal integrated risk management in Indonesian local government. This current study will contribute to filling the gap.

2.5 Conclusion

This chapter has discussed the concept of risk and presented some propositions regarding how to understand and manage risk. Beck's proposition regarding world risk society questions the role of the state in risk governance. Power's concepts of secondary risk and reputational risk and approaches to risk measurement are interesting contributions to the risk debate. Some authors state that risk can be seen as socially constructed phenomenon (Beck, 2006; Chan et al., 2010). Therefore, risk perception depends on context and past experiences, affected by value systems. People in different cultures prioritize risks differently and have different acceptable levels of risk (Chan et al., 2010; Douglas & Wildavsky, 1983). Further, people have different capacity in defining risks, and Western governments or stronger economic actors define risks for others (Beck, 2006). The concepts and the discussion of risk are mostly based on Western circumstances. This arouses curiosity to explore risk and risk management in other areas, such as the Asian region, including Indonesia. Because risk is socially and culturally constructed, perception of risk in this area should be different to Western constructions.

Relating to risk in the Asia region, Hutter identifies that there is a paucity of studies on understandings of risk in Asia. Further, Chan and colleagues argue that risk management systems in Asia are delayed and underdeveloped. However, some studies demonstrate that East Asia, in some cases, aligns with some Western ideas on risk, such as the concept of reflexive modernity, risk governance approaches, the changing role of the state in managing risk, and Beck's world risk society. This can be understood as resulting from East Asia being a relatively advanced area in Asia with similarities to Western countries.

However, the previous studies still leave some interesting questions, such as whether the state is a source of risk, what kind of risks are triggered by weaknesses of the state itself, and how the state deals with risks. These questions are significant from an Indonesian perspective, not only because there is a scarcity of study on risk in Asia in general, but also because of a need for a specific view of risk based on Indonesia's culture and value system, as a part of an Asian perspective.

The current study explores these questions from an Asian perspective, and especially in the context of Indonesia. Previous studies on risk in Asia have been conducted mostly in East Asia. Indonesia is representative of Asian countries with a large population facing many basic problems in many fields, and which are less prosperous compared with Western countries and even in comparison with some other East Asian countries. The current state of Indonesia, undergoing the process of decentralization, provides another perspective in the study of risk. This study will contribute to the understanding risk and risk management from an Asian perspective, that is, the perspective of a developing country. Indonesia has very different circumstances compared to Western areas where the idea of risk and risk management is already developed.

CHAPTER 3 : RESEARCH METHODOLOGY

3.1 Introduction

As stated in Chapter 1, this thesis aims to explore risk and risk management in Indonesian local government. This research seeks to answer two main questions. The first question is: What are the risks that impact significantly on post-decentralization Indonesian local government in achieving financial objectives? The second question is: How should local government best and most effectively manage the risks? Chapter 2 demonstrated that this research is an exploration of an area in which there are few previous studies. This is in line with the argument that “research is identified as a process or practice by which we can extend our knowledge or find the answer to our questions” (Matthews & Ross, 2010, p. 8).

The current research explores the understanding, perceptions and opinions of Indonesian local government officers relating to risk and actions or efforts to manage risk. Because risk and risk management in Indonesian local government are new areas of study, the research explores the interpretation and understanding of local government officers regarding risk as it appears in post-decentralization Indonesia and the efforts for managing risk based on their own actions or experiences. The research is mixed methods, using both qualitative and quantitative measures.

This chapter explains the methodological perspective and the strategies that were used to explore the above questions and arrive at a risk management framework for dealing with risks in the Indonesian local government context. The chapter is arranged in two sections. The first section discusses the epistemology that underlies this research and shapes the research approach. The second section describes the methods that were applied to collect and analyze research data.

3.2 Research Strategy

A key consideration in formulating this research strategy has been the proposition that risk is about perception, or is related to perception, as a result of learning processes and interaction with the environment. In other words, risks can be understood as socially constructed phenomena (Chan et al., 2010). As discussed in Chapter 2, people in different social organizations or cultures prioritize risks differently and have different acceptable levels of risk. The level of risk that causes concern will depend on social factors and prevailing discourses (Douglas & Wildavsky, 1983). Therefore, risks that significantly affect local government finance cannot be separated from the perception of local government officers and the prevailing views within local government organizations. This means that local government officers, who have direct experience carrying out and interacting with the processes of local government finance and its problems, can be seen as legitimate sources of information relating to risks in local government finance, and able to provide data in order to answer the first research question: What are the risks that impact significantly on post-decentralization Indonesian local government in achieving financial objectives?

Further, considering local government officers' comprehension of local government financial processes, it has been valuable to capture their views on the effectiveness of any risk management system in the Indonesian local government context, in order to explore the second research question: How should local government manage the risks or, in other words, what risk management framework is suitable for Indonesia local government?

In order to develop a risk management framework for Indonesian local government, an understanding of existing stages of risks and their treatment in Indonesian local government has been indispensable. This is based on the view that a broad understanding of what happens in Indonesian local government finance can assist in understanding and framing the context and current environment in which any proposed system would operate. However, the development of a risk management system also needed in-depth exploration of risk and its treatment in local government. A deep understanding of the existing state of local government efforts in dealing with risk assisted in identifying weaknesses of current practices. Further, the weaknesses could be taken as the starting point for any improvements.

In short, given that risk management is a new field in Indonesian local government, it is valuable to elicit the perceptions and understandings of local government officers on risks and efforts for dealing with risk in local government. Therefore, this research prioritizes local government officers' subjective interpretations and understandings of risk and risk management as social and cultural phenomenon. In epistemological terms, this research takes the position of interpretivism, which "prioritizes people's subjective interpretations and understandings of social phenomena and their own actions, and can be linked to the ontological position of constructivism" (Matthews & Ross, 2010, p. 28). Ontology refers to the way the social world and phenomena are viewed. In constructivism, "the nature of a social phenomenon is in understanding and meanings ascribed to the social phenomenon by the social actors" (Matthews & Ross, 2010, p. 28). According Matthews and Ross:

> An interpretevist approach has the following features:
>
> - Knowledge gathered includes people's interpretations and understanding.
> - The main focus is on how people interpret the social world and social phenomena, enabling different perspectives to be explored.
> - The researcher is interpreting other's people's interpretation in terms of the theories and concepts of the social researcher's discipline – studying the social phenomenon as if through the eyes of the people being researched.
> - The researcher works with the data gathered to generate theory. (Matthews & Ross, 2010, p. 28)

This thesis shares some typical characteristics of an interpretivist approach to social research, such as the collection of qualitative data, uncovering and working with subjective meanings, interpretation of meaning within a specific context, and emphathetic understanding (Matthews & Ross, 2010).

As noted, this research primarily uses qualitative data (rich in detail and description) of perceptions, interpretations and understandings of risk and risk management in Indonesia local government. However, there is a quantitative component in the form of a survey. According to Bryman (1989), there are seven features of qualitative research that can be summarized as follows:

- The researcher adopts the stance of an insider to the organization.
- The research gives a strong sense of context.
- There is an emphasis on process.
- The research approach is unstructured.
- More than one source of data is employed.
- The conception of organizational reality is striking.
- The Researcher maintains close proximity to the phenomena being investigated (Bryman, 1989).

With regard to the first point above, the focus of this research is risk and risk management in local government finance, and it was important to be familiar with the processes of daily operation. In this research, the stance of the researcher was not that of an insider, but rather as an observer who examined the process at a certain point in time. The understandings and perceptions of local government officers were the sources of information, rather than the researcher's experience. This follows from the interpretivist approach, which seeks to explore the perceptions and interpretations of the people being researched.

Bryman's second feature of qualitative research is giving a strong sense of context. As discussed in Chapter 2, risk perception depends on context, and this research was conducted in the specific context of Indonesian local government. It includes detailed description of Indonesian local government's structure and processes. To gain in-depth understanding, a case study method was employed. This is presented in the next section.

The third feature of qualitative research is an emphasis on process, and the unfolding of events in time. A purpose of this research is to develop an integrated formal risk management framework for Indonesian local government. Understanding processes of local government finance is an important part of the study. Some observations on particular stage of the processes, such as accounting and reporting, were employed during the study for enriched the understanding.

The fourth feature is that qualitative research applies an unstructured approach. As Matthews and Ross (2010) explain, qualitative research has no hypotheses to be tested. The main objective of this study was to understand risk and risk management in Indonesian local government. Risk management in local government is a new field of study and thus the research aimed to investigate how risk management operated in the local government environment. Whilst there is no a formal risk management in local government, unstructured approach provided flexibility in exploring efforts of local government in dealing with risk.

The study's objectives required collection of data from multiple sources, such as information from document review, results of self-risk assessment, and transcripts from interviews and focus groups. This enabled verification among data sources. It demonstrates Bryman's fifth feature of qualitative research. Multiple sources of data were used for the case studies. The various data sources were considered to be primary or secondary. Primary data was collected through fieldwork along with the use of official and public documents, questionnaires, individual interviews, and focus group discussion. The secondary data was from the Indonesian Statistics Board, Ministry of Finance, Ministry of Internal Affairs and other relevant documents.

Bryman's sixth feature of qualitative research concerns the conception of reality. Organizational culture in local government was not something that was simply "there" waiting to be examined, but rather is something that has been socially constructed and was being maintained by local government officers and the rules, norms and practices within local councils. They and their interactions shape the organizational culture of local government that distinguishes it from other organizations.

The seventh feature, qualitative research that "obtains and retains close proximity to the phenomena" (Bryman, 1989, p. 115) was reflected in the use of case studies, which were the direct product of close proximity and interaction with the local government officers who were the main source of data.

However, the study also needed a general view of risk and risk management from a nationwide perspective, especially for identifying common risks that appear in Indonesian local government finance, and common efforts of local governments seeking to deal with the risks. For achieving this perspective, the study needed to explore risks and current risk management throughout Indonesia local government. This stage applied a different approach, which started with the hypothesis that there were risks that affected local government in achieving their objectives. Therefore, the stage involved practices such as collecting quantitative data, measuring the social world or phenomena, observing causal relationships, and using statistical analysis. Further, data is used for testing a hypothesis that is generated from existing theory (Matthews & Ross, 2010). The approach develops from the objectivism ontological position, that "there is a social reality to study that is independent of the researcher" and "the researcher is independent of and have no impact on the data" (Matthews & Ross, 2010, p. 27). Following the approach, the study employed a nationwide survey.

Despite the paucity of studies on risk and risk management in Indonesia's public sector, one study, conducted by Widhyantoro (2009), applied risk assessment to a local government agency in order to identify risks and propose treatments using the risk management standard adopted by the Federation of European Risk Management Associations. The study identified 56 risks that were present in a local government agency, and suggested treatments. This research drew on Widhyantoro's work in constructing a nationwide survey. The survey explored local government's current practices in managing risk, based on international standards and practices. Description of the survey used in this thesis is presented in the next section.

3.3 Research Methods

As discussed in the previous section, this study has two parts: a survey of local officials representing all local governments and in-depth interviews with senior local government officials and local parliamentary members in three local governments as case studies. The survey aimed to capture a wide range of views regarding risks and their treatment in Indonesian local government. The study also took the form of a case study to explore, at a deeper level, the ways in which risk was understood, and current weaknesses in treatment as a starting point for developing a formal integrated risk management system. Below I describe in more detail the methods used, beginning with an overview of the survey.

3.3.1 Survey information

In the first part of the study, a survey was used in order to obtain general insights about risks that significantly influence achievement of objectives in local government finance through examining the perception and responses of respondents across Indonesian local government. The survey questionnaire was sent to all local governments in Indonesia. According to Ministry of Internal Affairs data, in 2013 Indonesia had 508 local governments comprised of 410 *kabupaten* (regencies) and 98 *kota* (city). Among those local governments, there is one *kabupaten* and five *kota*s in the Jakarta capital region that are not autonomous but are administrative. Of the rest, there were 11 *kabupaten* that were not yet operational because they were recently formed (Ministry of Internal Affair, 2013). Thus, the targeted respondents were the remaining 491 local governments.

The survey questionnaire comprise of five sections, with a total of 63 questions, as summarized in Table 3.1.

Table 3.1: Structure of Questionnaire

Section	Objective	Number of Questions
Section I: Risk Management Practice in Local Government		
Part 1	Examining existence of formal risk management based on ISO 31000:2009 and New South Wales Framework	20 questions
Part 2	Examining factors that prevent the implementation of effective risk management	12 questions
Section II: Risk Assessment	Examining practice of risk assessment in local government as a mandated by Government Regulation Number 60/2008	9 questions
Section III: Relationship between risks and achievement of objectives	Examining risks that significantly influence achievement of objectives	3 questions and 62 points for Question 3
Section IV: Nature of the Risks	Examining areas of consequences that affect achievement of objectives 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

In the following section I overview each part. Section I was developed to examine the existence of formal risk management in local government and factors that prevent it from being effectively implemented. The section consists of two parts and 32 questions. The respondents were asked to identify the existence of risk management practices and the implementation of aspects of formal and integrated risk management based on the ISO 31000:2009, an international standard of risk management, in their local government and agencies via "yes" and "no" questions. Section I of the questionnaire was adopted from the Risk Management Toolkit for New South Wales (NSW) Public Sector Agencies, which is used as guidance for risk management implementation in NSW government agencies (NSW Treasury, 2012).

Questions from the toolkit were used because of their simplicity and their alignment with ISO 31000. Therefore, it was expected to provide benchmarking with international practices. However, considering the objectives of the research and the specific context of Indonesian local government, there were some additions and modifications made to the questions as explained below.

Section II examined the practice of risk assessment in local government as required by Government Regulation Number 60/2008. According to this regulation, local government has an obligation to conduct risk assessment as a part of internal controls. Section II of the research questionnaire consisted of nine questions derived from the government regulation. In this section, the respondents were asked to identify the existence of practices and implementation of aspects of risk assessment based on the regulation in their local government and agencies in "yes" and "no" questions.

Section III was designed to collect data about the respondents' perceptions of risks that significantly influence the achievement of objectives in local government finance. In this section, based on their perception, the respondents were asked to identify the level of achievement of objectives and risks in their local government using a five level Likert scale. Section III explored the relation between risk level and local government's achievement of objectives. For this purpose, the study used the schema of risks that was proposed by Widhyantoro, who identified 56 risks during his study of risk in a local government (Widhyantoro, 2009). Considering the current issues in post-decentralization Indonesian local government, six risks (reputational risk, legal risk, political changes, terrorism, technology innovations and riots) were added to Widhyantoro's schema to make 62 risks. Furthermore, the objectives were represented as four general objectives as stated in Government Regulation Number 60/2008: efficiency and effectiveness of activities, reliability of financial reporting, safety of assets and compliance to regulations.

Section IV consists of 10 questions for examining how the risks affected the achievement of objectives by identifying areas of consequence that most influence the achievements of Indonesian local government. The respondents were asked to rate the areas in order of importance in affecting the achievement of their local government's finance objectives (from "1" for the most important, to "10" for the least important). For this purpose, this study used ten areas of consequence derived from the Risk Management Toolkit for NSW Public Sector Agencies which include (1) financial; (2) service delivery; (3) work health and safety; (4) community; (5) environment; (6) stakeholder satisfaction; (7) reputation and image; (8) exposure to fraud and corruption; (9) exposure to litigation; (10) and legal and regulatory areas (NSW Treasury, 2012).

Section V consists of nine factors that might trigger events that influence local government in achieving its objectives, or, in other words, that might be sources of risk. The factors were derived from *Badan Pengawasan Keuangan dan Pembangunan*'s (BPKP) risk assessment guidance (BPKP, 2007), which reflects the specific circumstances of Indonesia. In this section, based on their perception, respondents were asked to identify the possibility of each factor in affecting local government achievement of objectives via a five level Likert scale. This risk assessment guidance is one of the reference points for risk management in local government, and is outlined more fully in later chapters.

The survey targeted 982 respondents from 491 local governments across Indonesia: two respondents from each local government. The proposed respondents of the survey were from financial service offices, audit offices and other agencies involved in the local government financial cycle. The 982 questionnaires were sent by mail and included a letter of introduction and a stamped, self-addressed envelope for return of the questionnaire.

3.3.2 Case study

The second part of the research explored in-depth risk and its treatment in local government finance. Case study research, as Woodside has noted, is 'an inquiry that focuses on describing, understanding, predicting, and/or controlling the individual (i.e., process, animal, person, household, organization, group, industry, culture, or nationality)' (Woodside, 2010, p. 1). According to Gillham (2010), one characteristic of case study research is that it seeks a range of different evidence or data in order to get the best possible answers to the guiding questions. He writes that a fundamental characteristic of case study method is that the study does not start out with 'a *priori* theoretical notions (whether derived from the literature or not) − because until you get in there and get hold of your data, get to understand the context, you won't know what theories (explanations) work best or make the most sense' (Gillham, 2010, p. 2). Because risk management in Indonesia's local government is still a new area of research, a case study was seen as appropriate. The other reason for this method is that Indonesia consists of more than 500 local governments that lie in a territory 5,150km long and 1,700km wide. Therefore, it is almost impossible to conduct a comprehensive study of all local governments in Indonesia. The choice of local governments for the case study was made to give optimal insights given the inherent limitations (time and funds) of conducting research in such a vast country.

The case studies focused on three local governments that were chosen using non-probabilistic purposive sampling. The chosen local governments were expected to represent the broad condition of local governments in Indonesia, even though there were clear limitations in doing this. The main considerations in choosing the local governments were:

1) The amount of total revenue in their budget. The criteria represented the relative financial capacity of the local government in delivering public services. This was main criteria in choosing case study sites. Local government data was sorted by amount of total revenue, and then categorized in three groups; high, middle, or low. The chosen local governments were picked from each group. For this purpose, the study used total revenue from the 2013 budget data that was collected from Ministry of Finance's website (www.kemenkeu.go.id). There were 481 *kabupatens/kotas* that had budget data (including total revenue) available.
2) Location inside or outside Java. This criterion accommodated Java as a center of the economy and business activities in Indonesia. The chosen local governments represented local governments from Java and other islands.
3) Type of local government (*kabupaten*/regency or *kota*/city). Local government in Indonesia has two forms: *kabupaten* for rural areas and *kota* for urban areas. *Kabupaten* and *kota* have the same responsibility and governmental structure, however, they vary in service delivery because of different characteristics between rural and urban areas. Indonesia had 410 *kabupaten* and 98 *kota*. The chosen local governments were two regencies and one city.

Efficiency (considering the cost and time limitations of the research) and effectiveness (considering suitability of the sample for exploring research questions) were also considered in the selection of case study sites.

In general, the case studies were intended to be representative of the condition of local governments in Indonesia. The process of selecting the case study sites is detailed in Figure 3.1 below.

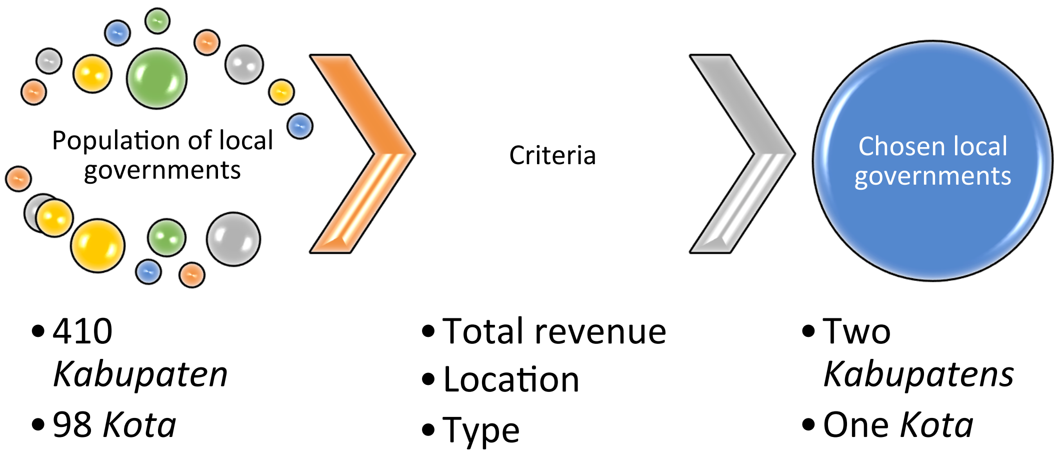

Figure 3.1: Process Used to Select Case Study Sites

The researcher determined three local governments as case study locations. These three local governments fulfilled the above criteria. The local governments and their attributes in relation to the criteria are described in Table 3.2 below.

Table 3.2: Attributes of Case Study Sites

Local governments	Total revenue	Location	Type
Local Government 1	Middle	Inside Java	Kabupaten
Local Government 2	High	Outside Java	Kabupaten
Local Government 3	Low	Outside Java	Kota

The case studies were primarily conducted using self-risk assessment and in-depth interviews in the selected local governments. However, in order to deepen the study further, some interviews and focus group discussions with central government officers and a document review were also conducted, including review of the local government development plan, budget, organizational structure, audit result, and control self-assessment (CSA) documents.

Self-risk assessment was carried out using a risk assessment form. The form was a table containing nine columns. These are represented in Table 3.3 below.

Table 3.3: Description of Self-Risk Assessment Form

<table>
<tr><th>Column No.</th><th>Description</th></tr>
<tr><td>1</td><td>Number of identified risks</td></tr>
<tr><td>2</td><td>Name/description of identified risks</td></tr>
<tr><td>3</td><td>Local government's financial steps affected by each risk. Each step is represented by a code. The codes are listed below:
<table>
<tr><th>Step of Financial Process</th><th>Code</th></tr>
<tr><td>Planning and budgeting</td><td>1</td></tr>
<tr><td>Executing and administering</td><td>2</td></tr>
<tr><td>Accounting</td><td>3</td></tr>
<tr><td>Reporting</td><td>4</td></tr>
<tr><td>Controlling</td><td>5</td></tr>
<tr><td>Accountability</td><td>6</td></tr>
</table></td></tr>
<tr><td>4</td><td>The objectives of financial process affected by each risk. Each objective is represented by a code. The codes are listed below:
<table>
<tr><th>Objectives</th><th>Code</th></tr>
<tr><td>Efficiency and effectiveness of activities</td><td>1</td></tr>
<tr><td>Reliability of financial reporting</td><td>2</td></tr>
<tr><td>Safety of assets</td><td>3</td></tr>
<tr><td>Compliance of regulation</td><td>4</td></tr>
</table></td></tr>
<tr><td>5</td><td>Identified factors that may trigger the risks. Each factor is represented by a code. The codes are listed below:
<table>
<tr><th>Factors</th><th>Code</th></tr>
<tr><td>EXTERNAL</td><td></td></tr>
<tr><td>Economic and business shifts and circumstances</td><td>1</td></tr>
<tr><td>Natural forces and events</td><td>2</td></tr>
<tr><td>Political and regulation changes</td><td>3</td></tr>
<tr><td>Social changes</td><td>4</td></tr>
<tr><td>Technological innovations</td><td>5</td></tr>
<tr><td>INTERNAL</td><td></td></tr>
<tr><td>Condition of infrastructure</td><td>6</td></tr>
<tr><td>Quality and quantity of human resources</td><td>7</td></tr>
<tr><td>Technological changes and implementation</td><td>8</td></tr>
<tr><td>Weakness and complexity of processes in service delivery</td><td>9</td></tr>
</table></td></tr>
<tr><td>6</td><td>Level of consequences of each identified risk, as represented by a code as listed below:
<table>
<tr><td>Very high</td><td>4</td></tr>
<tr><td>High</td><td>3</td></tr>
<tr><td>Medium</td><td>2</td></tr>
<tr><td>Low</td><td>1</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Column No.</th><th>Description</th></tr>
<tr><td>7</td><td>Level of likelihood of each identified risk, as represented by a code as listed below:
<table>
<tr><td>Almost certain</td><td>4</td></tr>
<tr><td>Likely</td><td>3</td></tr>
<tr><td>Possible</td><td>2</td></tr>
<tr><td>Rare</td><td>1</td></tr>
</table></td></tr>
<tr><td>8</td><td>Description of existing controls/efforts in dealing with each risk carried out by local government.</td></tr>
<tr><td>9</td><td>Level of effectiveness of each existing control/effort carried out by local government, as represented by a code as listed below:
<table>
<tr><td>Substantially effective</td><td>3</td></tr>
<tr><td>Partially effective</td><td>2</td></tr>
<tr><td>Largely ineffective</td><td>1</td></tr>
</table></td></tr>
</table>

The self-risk assessment was intended to capture the risks that appeared in local government finance, their sources, their level, existing controls/efforts and the effectiveness of the efforts based on the experience and perception of the local government officers. The assessment process involved agencies from each chosen local government that had a relation to local government financial process. The risk assessment forms were filled out by a local government officer or a group of local government officers, as representatives of the agencies. The risk assessment forms were submitted through the head of the agencies. The agencies involved in this procedure for each local government are listed in Table 3.4 below.

Table 3.4: Risk Assessment in Participant Agencies

Local Government 1	Local Government 2	Local Government 3
Planning agency	Financial service agency	Financial service agency
Audit office	Revenue service agency	Audit office
Tourism service agency	Education service agency	Education service agency
Financial service agency	Planning agency	Planning agency
Housing and settlement, spatial and sanitary service agency	Audit office	Health service agency

Further, in-depth interviews were carried out to capture deeper information related to risks in local government finance. The interviews used guidance questions aligned with the research question. The interviews involved 38 local government officers and members of local parliament from the three chosen local governments. They came from various agencies as listed in Table 3.5 below.

Table 3.5: Interview Respondents by Agency

No.	Agencies	Number of Respondents			
		LG 1*	LG 2	LG 3	Total
1	Financial service agency	3	5	5	13
2	Revenue service agency		2		2
3	Education service agency		2	1	3
4	Planning agency	2	2	1	5
5	Audit office	2	2	2	6
6	Health service agency			2	2
7	Housing and settlement, spatial and sanitary service agency	2			2
8	Tourism service agency	2			2
9	Member of local parliament	1	1	1	3
		12	14	12	38

*LG: Local Government

To capture another perspective, interviews with central government officers were conducted. This involved three participants from two different agencies. A focus group discussion was also conducted with three participants from a central government agency. The central government officers involved in the study have daily jobs relating to local government finance. Therefore, they are competent as sources of information relating to local government finance. Each respondent is listed with a code number in Appendix D.

Because the research involved human beings, the research required ethics approval from the Social and Behavioural Research Ethics Committee (SBREC) of Flinders University. The research was granted final ethics approval on February 13, 2014 as Project Number 6378. The research, especially case studies, employed in-depth interviews that involved local government officers. The interviews explored more deeply risk and risk management matters in local government, therefore it included collection of critical and sensitive information. Considering that this situation can influence local governments' reputation and participant's positions in their workplaces, anonymity is vitally important in this thesis, name of local governments and participants are presented in codes.

3.3.3 Data analysis

Both qualitative and quantitative analyses were conducted for this study. According to Miles and Huberman (1994), there are four designs that provide links between quantitative and qualitative research:

- Design 1: fieldwork involving steady, integrated collection of qualitative and quantitative data, as needed to understand the case at hand.
- Design 2: a multi-wave survey, conducted concurrently with continuous fieldwork.
- Design 3: beginning with exploratory fieldwork, leading to the development of quantitative instruments. The findings can be further deepened and tested with further rounds of qualitative work.
- Design 4: an initial survey to point the researcher to phenomena of importance is followed by the development of a close-up, conceptual understanding of how things work and further quantitative work to test the results (Miles & Huberman, 1994, pp. 41-42).

This study uses Design 1, with the quantitative and qualitative approaches running concurrently.

3.3.3.1 Analysis of survey data

As noted previously, the survey was used to get general insight about the risks that significantly influence achievement of objectives in local government finance and their treatment through examining the perception and responses of respondents across Indonesia. This survey took the form of a questionnaire that was designed to collect data regarding respondents' perceptions about risks that significantly influence the achievement of objectives and other matters as described earlier. As described, the questionnaire contained five sections.

The first section of the questionnaire used "yes" and "no" questions in order to capture the perceptions and responses of the respondents with regard to the implementation of formal risk management and its obstacles in local government finance. To obtain a general overview of matters in Indonesian local government, the results were analyzed using percentage analysis. Percentage analysis is "the method to represent raw streams of data as a percentage (a part in 100) for better understanding of collect data" (Gopalakrishnan & Sukumar, 2013, p. 68), as summarized by the following equation:

$$Percentage\ Analysis = \frac{number\ of\ respondents}{total\ number\ of\ respondents}\ x\ 100$$

The analysis showed the proportion of the respondents who confirmed the existence of formal risk management and its attributes or characteristics in local government finance, and the obstacles to implementation.

The second section of the questionnaire was analyzed in the same way. This analysis demonstrated the portion of respondents who identified the existence of risk assessment in local government finance as mandated by regulation in Indonesia. The third section of the questionnaire explored the relationship between the risks identified and the achievement of objectives in local government finance. The results were analyzed using multiple regression. This model is used to analyse the relationship between one dependent variable and several independent variables (Tabachnick, 2013). Statistically, the multiple regression can be described in the expression below:

$$Y=A + B_1X_1+ B_2X_2 + B_3X_3 + . . . + B_kX_n$$

Y = Level of objective achievement in local government finance (Dependent variable/DV)

X=Level of risks that influence objective achievement (independent variable/IV)

The dependent variable of the model is the level of the achievement of objectives in local government finance as represented by four components stated in Indonesian Government Regulation Number 60/2008 include (1) efficiency and effectiveness of activities; (2) reliability of financial reporting; (3) safety of assets; (4) compliance to regulations.

The questionnaire captured the perceptions of the respondents to level achievement of each component using a five level Likert scale. Further, the results were averaged to obtain the level of overall achievement.

The independent variables of this model were risks that significantly influence the achievement of objectives. The questionnaire captured the perceptions of the respondents on the level of each risk that might influence local government financial objectives. The level of risk was captured via a five level Likert scale. The questionnaire provided a list of risks that might appear in local government finance. For this purpose, the study used the schema of risks identified by Widhyantoro in one local government agency. However, the schema of risks was modified to align with current risk issues.

Before undertaking the multiple regression analysis, the data (independent variables) obtained was summarized using exploratory factor analysis (EFA). This step regroups the variables so that relationships and patterns can be easily understood (Yong & Pearce, 2013). The missing data (in this case there were six blank questionnaire responses) were excluded from the analysis. The EFA and the multiple regression analysis were carried out with IBM SPSS Version 22.

The fourth section of the questionnaire examined areas that were affected by the consequences of the risks: outcomes that influence objectives. Identifying the affected areas assisted in giving a better understanding of the risks. Data obtained was the views of respondents regarding ratings and order of areas of consequence that influenced local government financial objectives. For obtaining levels of each area, the mode of the data, a descriptive statistical analysis, was used.

The fifth section of the questionnaire identified factors that might be the sources of the risks. The section captured the perceptions of the respondents on factors most likely to be involved in triggering risks in local government finance. The results were captured via a five level Likert scale representing level of possibility (1=rare, 2=unlikely, 3=possible, 4=likely and 5=almost certain). The result of each listed factor was analyzed using descriptive statistics (mean, median and mode) to determine the level of possibility of the factor in triggering risks.

3.3.3.2 Analysis of case study data

Data was collected for the case studies using a range of methods: self-risk assessment, in-depth interviews, and document review. The self-risk assessment form was completed by local government officers following prepared guidance. It produced a risk profile of local government finance and its treatment of the risks. In substance, the process of risk assessment followed risk management processes based on ISO 31000. According to this standard, risk management processes can be illustrated as in the Figure 3.2.

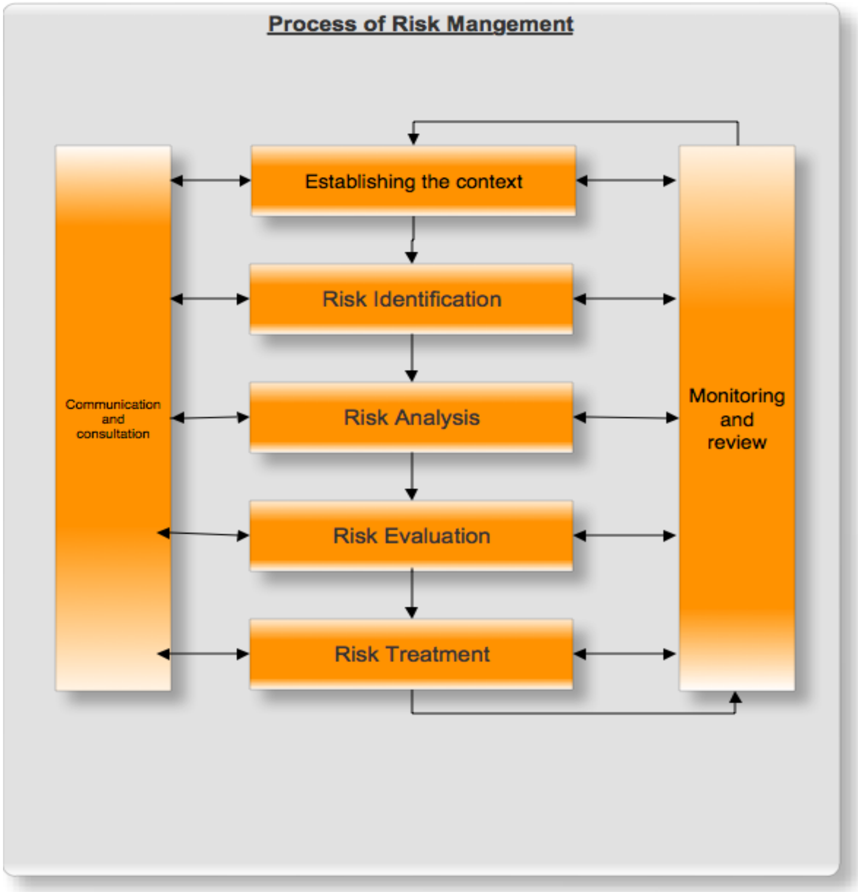

Figure 3.2: ISO 31000 Risk Management Process

Source: ISO 31000:2009

Not all of the above steps were carried out in this study. The focus was risk identification, risk analysis, risk evaluation and identification of risk treatment in local government finance. According to the ISO, risk identification is the process of finding, recognizing and describing risks. This activity involved the identification of risk sources, events, their causes, and their potential consequences. The risks identified were analyzed in the next step, with a focus on determining the level of the risks. Risk level was treated as a combination of potential consequences and likelihood of each risk. Risk levels of each risk were compared with risk criteria that determined based on consensus among respondents, in determining whether a risk and its magnitude is tolerable or acceptable (ISO, 2009).

The important steps in determining significance of the risk in affecting the objectives were risk analysis and risk evaluation. As mentioned above, risk level is a combination of the consequences and likelihood of each risk. Consequence is the outcome of the events affecting objectives (ISO, 2009). This study used a four level Likert scale representing consequence level (very high=4, high=3, medium=2 and low=1). The consequence level captured the perception of respondents on the impact of risks on local government financial objectives.

Likelihood is the chance of something happening (ISO, 2009). In other words, it is the possibility of a risk event occurring. In a similar manner to this study's consideration of consequences, this study used a four level Likert scale to represent the level of likelihood (4=almost certain, 3=likely, 2=possible and 1=rare). The likelihood captured respondents' perceptions of the possibility of risk occurrence.

For obtaining the level of each risk, the data regarding consequences and likelihoods was analyzed using risk matrices. A risk matrix is a qualitative analysis of risk and provides a graphic representation of the relationship between consequence, likelihood, and the resulting risk level. Each square of the risk matrix represents a risk level (NSW Treasury, 2012a). According to Cox (2008), a risk matrix associates "a recommended level of risk, urgency, priority or management action with each row-column pair, that is, with each cell" (Cox, 2008, p. 497). Furthermore, Cox states that risk matrices are recommended in national and international standards, because they are a simple and effective approach to risk management, and require no special expertise in quantitative risk assessment methods or data analysis (Cox, 2008). The risk matrix that was used for this study is described below. The color of each cell represents the risk level as determined by discussion of respondents. This risk matrix was produced using Microsoft Excel software.

		CONSEQUENCE			
		Low	Medium	High	Very High
LIKELIHOOD	Almost certain	2	2	3	4
	Likely	1	2	3	3
	Possible	1	2	2	3
	Rare	1	1	2	

Figure 3.3: Risk Matrix

Each color determines the level of risk to the achievement of objectives. A description of each level used in this study is presented in Table 3.6 below.

Table 3.6: Description of Risk Levels Used in this Study

Risk level group	Description	Level of significance and action required for risk group
4	Extreme	Risks are extremely significant in affecting achievement of objectives, and need treatment immediately
3	Critical	Risks are very significant in affecting achievement of objectives, and need treatment
2	Moderate	Risks are slightly significant in affecting achievement of objectives, and will be treated as long as the costs do not outweigh the benefits
1	Minimal	Risks are not at all significant, and need no treatment

A further step in the case study was the in-depth interviews. In this step, thematic analysis was applied to interview data. According to Grbich (2013), thematic analysis is a process of segmentation, categorization, and relinking of aspects of the data prior to final interpretation. Further, thematic analysis involves several stages:

1. Reading and re-reading the database.
2. Recalling the research questions.
3. Underlining or coloring key segments.
4. Grouping like segments.
5. Attaching overarching labels and identifying subgroups.
6. Conceptualizing the grouping and linking with literature and theory (Grbich, 2013, p. 61).

Furthermore, Matthews and Ross (2010) propose steps for organizing data that involve:

1. Creating an index—a way of finding data when needed.
2. Creating some initial categories or codes related to some of the themes or issues that have been identified.
3. Creating summary charts to help look at data within each case, and in initial categories across the cases (Matthews & Ross, 2010, p. 374).

This study combined the steps of Grbich, and Matthews and Ross. Firstly, all interviews were transcribed. Each transcript received approval from each interviewee to control bias. In the initial phase of analysis, an index of data was created. The index gave each interview transcript a code to make it easier for the data to be found later in the analysis process. Next, some initial categories related to some of the themes were identified based on the guiding questions of the study. Third, the data was put into a summary chart or table so the data could be analyzed in two ways: a set of data from each respondent and a way of looking at each of the initial categories/themes across all the respondents. The process of analysis, especially for producing the summary table, used Microsoft Excel and Microsoft Word. Based on the summary table, the data was interpreted, described and related to guiding questions of the study.

This research applied both quantitative and qualitative approaches in exploring the research question. The quantitative data collection was conducted through a nationwide survey that targeted all Indonesian local governments. The case study was employed for collecting the qualitative data through self-risk assessment, interviews and focus group discussion. A summary of the data collection strategy, and its relation with the research objectives and guiding questions, is presented in Table 3.7.

Table 3.7: Data Collection Strategy

Research objectives and guiding questions	Methods	Techniques	Respondents
Objective 1: **To examine the nature of risks within local government finance and demonstrate how the risks affect the achievement of local government goals and objectives**			
What are risks that significantly influence achievement of the objectives of local government finance?	Survey	Questionnaire was sent to 491 local governments across Indonesia	982 targeted respondents (two local government officers involved in the process of local government finance for each local government)
	In-depth interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from central government
	Focus group discussion	Conducted a focus group discussion	3 targeted participants from

Research objectives and guiding questions	Methods	Techniques	Respondents
			central government offices
	Self-risk assessment	Sent self-risk assessment questionnaire	15 targeted agencies from three local governments
	Document review	Document analysis	Documents that can be used to identify risks in local government finance
How will risks influence achievement of the objectives of local government finance?	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from central government
	Focus group discussion	Conducted a focus group discussion	3 targeted participants from central government offices
What are factors/sources that cause the risks?	Focus group discussion	Conducted a focus group discussion	3 targeted participants from central government offices
	Survey	Questionnaire was sent to 491 local governments across	982 targeted respondents (two local government

Research objectives and guiding questions	Methods	Techniques	Respondents
		Indonesia.	officers involved in the process of local government finance for each local government)
	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from central government
Objective 2: **To examine and analyze the efforts of local government to manage and treat risks, and to identify the strengths and weakness of the efforts**			
How does local government treat risks that appear in financial management processes?	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from central government
What are the strengths and weaknesses of local government's efforts in dealing	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from

Research objectives and guiding questions	Methods	Techniques	Respondents
with risks?			central government
	Focus group discussion	Conducted a focus group discussion	3 targeted participants from central government offices
Objective 3:			
To suggest a framework on how to treat/modify risks thereby promoting good governance at the local government level			
How to overcome the weaknesses of local government's risk treatment in order to make improvements?	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three respondents from central government
	Focus group discussion	Conducted a focus group discussion	3 targeted participants from central government offices
What kind of risk management framework is suitable to circumstances of local government finance?	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from central government

Research objectives and guiding questions	Methods	Techniques	Respondents
	Focus group discussion	Conducted a focus group discussion	3 targeted participants from central government officers
	In-depth Interview	Conducted personal interviews	38 targeted respondents from three local governments and three targeted respondents from central government

Further, the quantitative data was analyzed using percentage analysis, multiple regression, and descriptive statistic as shown in Table 3.8.

Table 3.8: Methods used for Data Analysis

Data collection	Number of questions	Type of question	Analysis
Section I: Risk Management Practice in Local Government			Percentage analysis
Part 1	20 questions	Yes or no question	Percentage analysis
Part 2	12 questions	Yes or no question	Percentage analysis
Section II: Risk Assessment	9 questions	Yes or no question	Percentage analysis
Section III: Relationship between risks and achievement of objectives	3 questions and 62 points for Question 3	Question with Likert scale answer	Multiple regression

Data collection	Number of questions	Type of question	Analysis
Section IV: Nature of the Risks	10 questions	Sorting the items based on their importance (1 to 10)	Descriptive statistic (mode)
Section V: Risk Sources	9 questions	Question with Likert scale answer	Descriptive statistics (mean, median and mode)
Self-risk assessment	9 column questionnaire	Open ended and closed	Risk matrices
Interview	12 questions	Open ended	Thematic analysis

3.4 Conclusion

This chapter has provided an overview of the research methodology used in this study. The research applied two methods for collecting data: a nationwide survey and case studies of three Indonesian local governments. The survey employed a questionnaire to explore local government finance employees' general views regarding risk and its current treatment in local government. The case study used self-risk assessment, in-depth interviews and focus group discussion to gain a deeper understanding of risks, current efforts in dealing with risks, the weaknesses of current efforts, and how to improve current practices.

The results of the quantitative data analysis are discussed in Chapters 4 and 6. The qualitative data from self-risk assessment was analyzed using risk matrices to identify risk levels, and is described in Chapter 4. Thematic analysis was applied to the interview and focus group data. The results of the thematic analysis are discussed in Chapters 5, 7, 8 and 9.

CHAPTER 4 : RISK IN INDONESIAN LOCAL GOVERNMENT FINANCE

4.1 Introduction

The inherent complexity of changing local government's financial systems together with the problems and weaknesses that appear in post-decentralization local government finance, coalesce to increase uncertainty in achieving local government objectives. This complexity and uncertainty results in local government facing risks (Chan et al., 2010). For some kinds of services, regulations do not assign responsibility to specific levels of government. Instead they are assigned to many levels of government: central, provincial and local. Dwiyanto (2011) argues that the relationship among levels of government is very complicated and confusing. It raises complex issues in delivery of services to the community. The authority for awarding certain types of license spreads across bureaucratic entities and across levels of government. It can be understood that sometimes service delivery is a long and complicated process in Indonesia. This complexity results in suboptimal use of citizens' resources and of the government itself (Dwiyanto, 2011). The complexities themselves raise issues of risk. Despite the presence of these risks, risk and risk management in Indonesian local government is a still a new area and there is a paucity of research on these matters, as discussed in Chapter 3.

Against this backdrop, the objective of this chapter is to discuss the risks that emerge in Indonesia's post-decentralization local government financial systems based on an original study of Indonesia's local government. The chapter discusses risk and its nature based on two sources of data: the survey and self-risk assessment (the latter conducted as part of the case study). The chapter is structured in two sections. The first section discusses the risks that influence local government finance based on quantitative data from the survey and self-risk assessment findings. The second section is a discussion about risks in the context of a post-decentralization local government financial system.

4.2 Risk in Local Government

4.2.1 Problems in local government finance and their significance

Indonesia's decentralization, as discussed in Chapter 2, has been marked by weaknesses and problems that can be seen as distractions for local governments in achieving their objectives. Some studies have explored and identified these challenges, including the work of Lewis (2008) and Lewis and Oosterman (2009). One challenge is the accumulation of significant idle funds, which reached approximately 3% of GDP from unmatched budget during 2001–2006 (Lewis, 2008). As Lewis and Oosterman suggest, this was caused by an increase in central government transfers and the underestimating of shared natural resource revenue, accompanied by overestimation of spending (Lewis and Oosterman, 2009). Furthermore, Lewis proposes that the idle funds reflect unfulfilled programs or activities and may affect the capacity of local government to deliver their services and fulfill public needs in order to satisfy constituents. However, other aspects are also important such as actual quality of services, budget transparency and trust (Lewis, 2010).

Furthermore, as discussed in Chapter 1, there are substantial weaknesses in accounting and reporting, as vital components of accountability in local government finance. For the fiscal year 2013, The Audit Board (BPK-RI) reported that only 32.32% of local governments' financial statements matched governmental accounting standards (BPK-RI, 2014). Furthermore, in 2013 The Audit Board found cases beyond accounting and reporting practices, including financial losses and potential losses, revenue shortfalls, problems of inefficiency and ineffectiveness, noncompliance to regulation and internal control weaknesses. Table 4.1 below from BPK-RI's audit report shows these cases and their value.

Table 4.1: Audit Board's Finding

Nature of the cases	Number of cases	Value (in millions IDR)
Financial losses	79	35,366.00
Potential financial losses	33	122,236.00
Un-received revenues	31	18,987.00
Uneconomical	11	12,018.00

Nature of the cases	Number of cases	Value (in millions IDR)
Ineffectiveness	59	17,717.00
Noncompliance to regulation	5,429	2,178,078.00
Weaknesses in Internal control	4,766	0.00
Total	10,408	2,384,402.00

Source: Compiled from First Semester Audit Report for the year of 2014, BPK, 2014.

These findings demonstrate that noncompliance with regulation and weaknesses in internal controls are significant problems in local government finance. They are indicated by 5,429 cases and 4,766 cases respectively. Further, according to BPK-RI, there were 2,182 cases of internal control weakness related to controlling budget execution. These weaknesses caused loss of potential revenue and increases in expenses/expenditures. Furthermore, 2,347 cases of noncompliance raised real loss to local government finance of an amount totally IDR 985,710 million or about USD 106 million (assuming USD 1=IDR 9,300) (BPK-RI, 2014).

Fraud or corruption is also a significant risk for local government. As discussed in Chapter 1, according to Rinaldi, and colleagues (2007), as of 2006, 265 corruption cases involving 967 local parliament members and 61 regents and mayors were identified and handled by the District Prosecutor's offices (Rinaldi et al., 2007). In addition, during the period 2004–2011, KPK handled corruption cases that involved 49 members of local parliament and 37 governors, regents or mayors (KPK, 2011).

As discussed earlier, decentralization was the catalyst for changes in the Indonesian local government financial system, and triggered the problems that now occur in post-decentralization local government finance. This lends support to Beck's proposition that societal institutions, such as science, the state (in this case Indonesian local governments), business and military, are seen as the instruments of risk management, and in recent times also as sources of risks (Beck, 2006). If we accept Beck's proposition that "radicalization of modernity produces this fundamental irony of risk: science, the state and the military are becoming part of the problem they are supposed to solve" (Beck, 2006, p. 338), it raises an important question: How can these risks be better identified and managed in the context of the state or, in this case, local government?

This question is important because local government finance in Indonesia is significant compared with national government finance. Risks that affect local government in achieving its financial objectives may influence the performance of the Indonesian government as a whole in accomplishing its mission. The significance of local government finance can be indicated by the amount of local government transfer (as a part of local government finance) relating to total central government expenditures. During 2010–2015, the transfer amount from central government to local government is about one-third of total Indonesia's central government expenditure. In this period, the percentage of the transfer was relatively constant, but it increased in absolute terms. In 2010, local government transfer was IDR 344,728 billion, and this increased significantly in 2015 to IDR 637.975 billion (Ministry of Finance, 2015). This data is illustrated in the charts below.

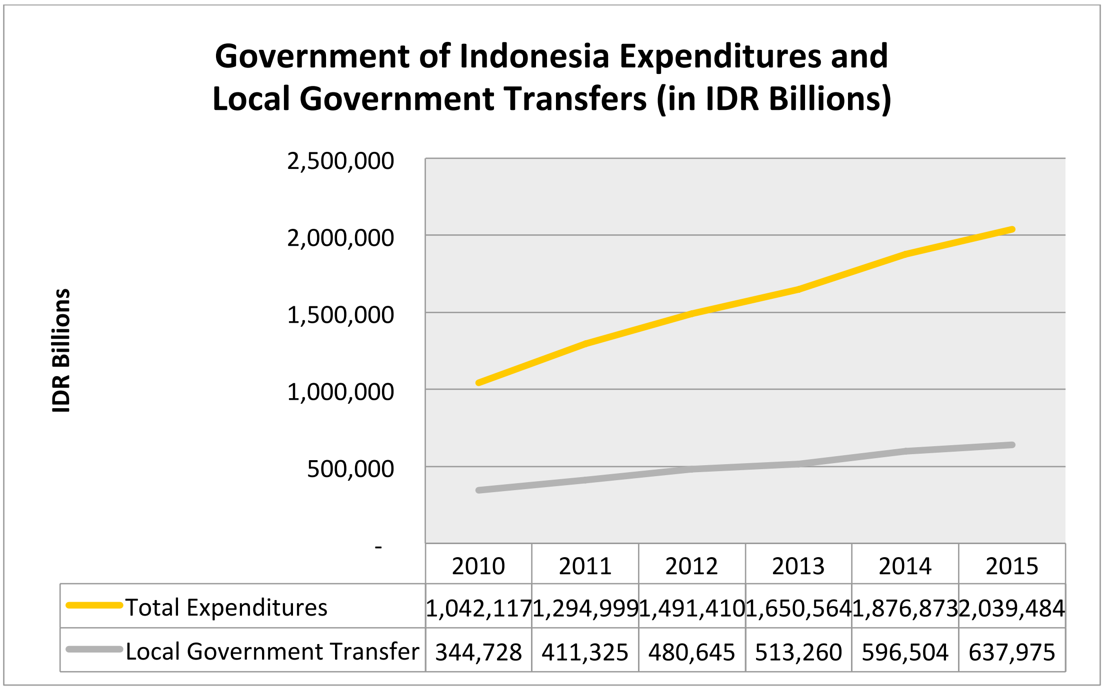

Figure 4.1: Government of Indonesia Total Expenditure and Local Government Transfer in IDR Billions

Source: Government of Indonesia's Budget 2015 (Ministry of Finance, 2015)

4.2.2 Risks in local government finance: Research findings

The previous section discussed the complexity of the local government financial process. It also demonstrated the issues that may be raised in the process. This section discusses the findings of this study to answer the question: What are the risks that impact on post-decentralization Indonesian local government in achieving its financial objectives? Concept and understanding of risk are discussed earlier in Chapter 2. Risk is effect of uncertainty on objective (ISO, 2009). Risk can result in positive, negative, or neutral events (COSO, 2004a), and risk also can be seen as social constructed phenomenon (Beck, 2006; Chan et al., 2010).

To accomplish this, this study conducted quantitative and qualitative explorations. The quantitative part was conducted using a survey across the entirety of Indonesia. The qualitative parts were conducted using in-depth case studies in three local governments in Indonesia. A risk assessment survey and personal interview were used in data collection for the case studies. However, this study was not restricted to these methods and applied other procedures as needed. The results of each procedure have been used to complete and verify each other.

4.2.2.1 Survey findings

As outlined in the methodology chapter, a questionnaire was sent by mail to respondents with a letter of introduction and a stamped return envelope. The response rate to this survey was relatively low. At the end of survey period, 96 respondents (9.78%) had sent back the questionnaire. From these, 90 respondents (9.16%) answered the questionnaire completely and six respondents returned blank questionnaires. The 90 respondents came from 65 local governments (13.24%) in 28 provinces (87.50%). Although the survey response rate was low, the findings of the study could be treated as signposts to be explored more deeply in the case study research. The questionnaire data is illustrated in Table 4.2 below.

Table 4.2: Response Rate of Invited Respondents

	Number respondents invited	Number response	Responses as a percentage of invitation
Respondents (All)	982	96	9.78%
Respondents (completed)	982	90	9.16%
Local government	491	65	13.24%
Province	32	28	87.50%

The questionnaires were sent to the secretary of each local government. They were expected to pass the questionnaire to the head and staff of their financial service office and audit office. Such respondents were assumed have a good understanding of local government finance and were deemed suitable to answer the survey. The respondents who sent back the questionnaire were involved in financial service offices (57 respondents), audit offices (16 respondents), and other offices (17 respondents). Those respondents consisted of heads of office or echelon II (12 respondents), staff from echelon III and IV (65 respondents), and general staff (13 respondents). According to Government Regulation Number 100/2000, an echelon is a level in the structure of the Indonesian bureaucracy. There are four echelon levels (I, II, III and IV) and each level is classified into two grades (A and B). A government officer without an echelon position is a member of staff (Republic of Indonesia, 2000). Further, based on Government Regulation Number 41/2007, at the local government level, the highest echelon is echelon IIA (Republic of Indonesia, 2007a). For the reason that this study covers almost each echelon level and the staff, the respondents well represent local government offices. The employment areas and levels of respondents are illustrated in Figures 4.2 and 4.3 below.

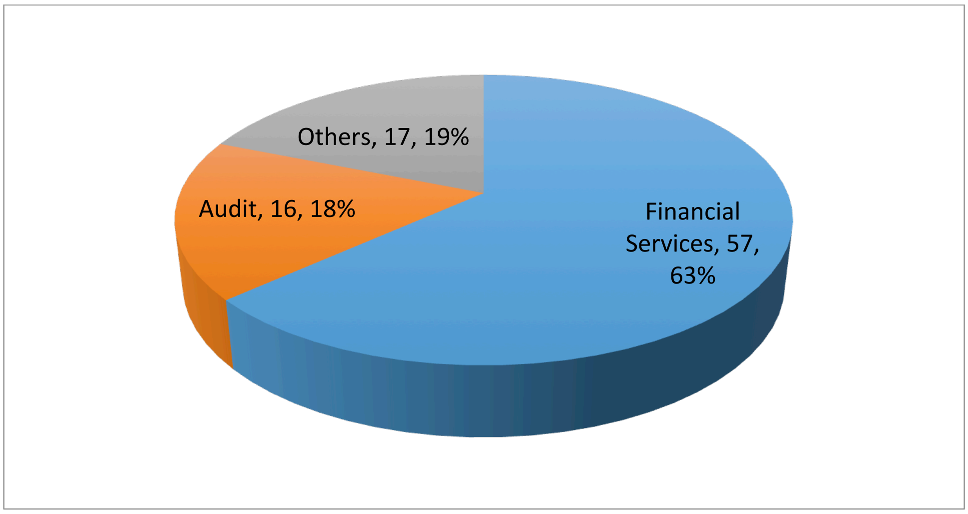

Figure 4.2: Respondents by Job Area

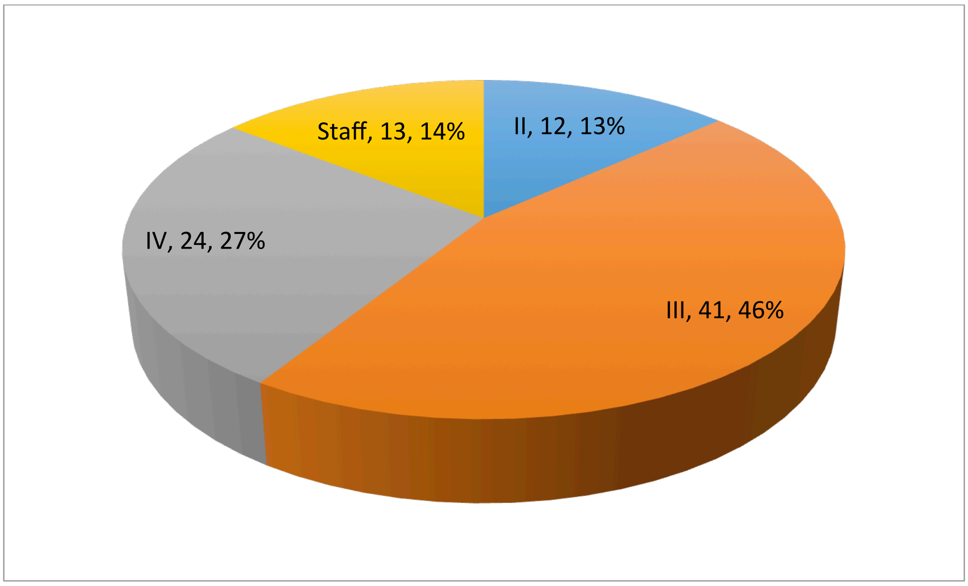

Figure 4.3: Respondents by Echelon

Survey respondents included staff from almost all levels in the organizational structure of local government. Staff (non echelon) at the lowest level in the structure, and echelon II (head of agency) provided the most responses.

The respondents comprised 59 men and 31 women between 20 and 60 years of age. The profile of the respondents is illustrated by the pie charts below.

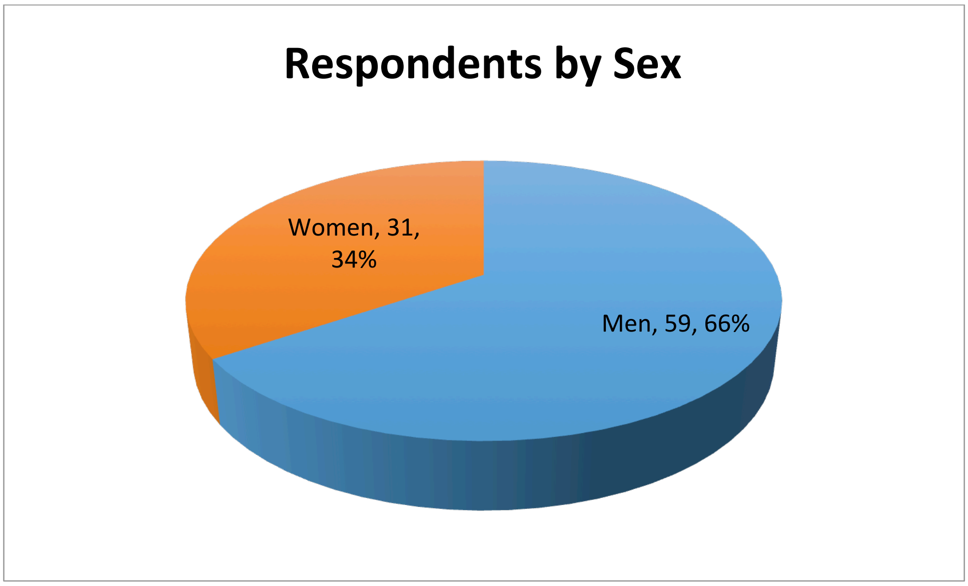

Figure 4.4: Respondents by Sex

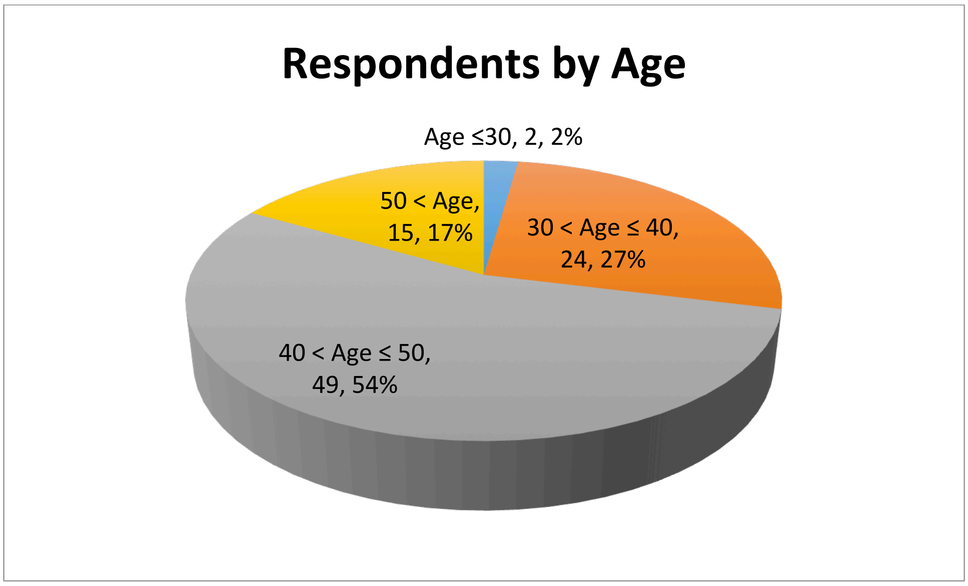

Figure 4.5: Respondents by Age

The respondents had various educational backgrounds in areas such as economics, accounting, public administration, human resource management, law, finance, and marketing. Respondents also varied in the level of education they had completed. Two had doctorate degree (Strata 3/S3), 54 had master's degrees (Strata 2/S2), and 34 had bachelor or diploma level qualifications (Strata 1/S1 and Diploma 3/D3). They also spaned a range of years of work experience (WE) in local government jobs, from less than 5 years to more than 20 years. The composition of degrees and the work experience is illustrated below:

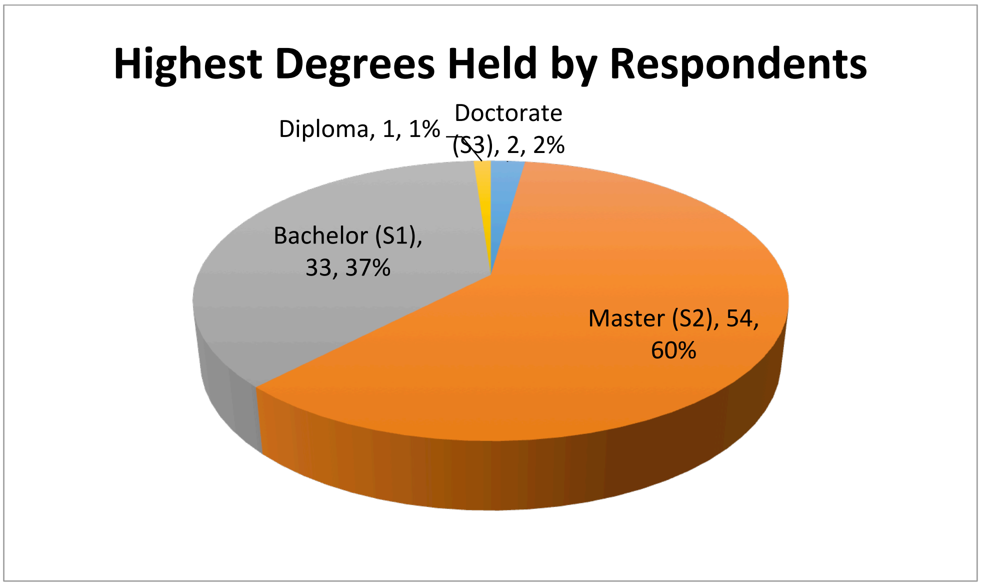

Figure 4.6: Educational Background of the Respondents

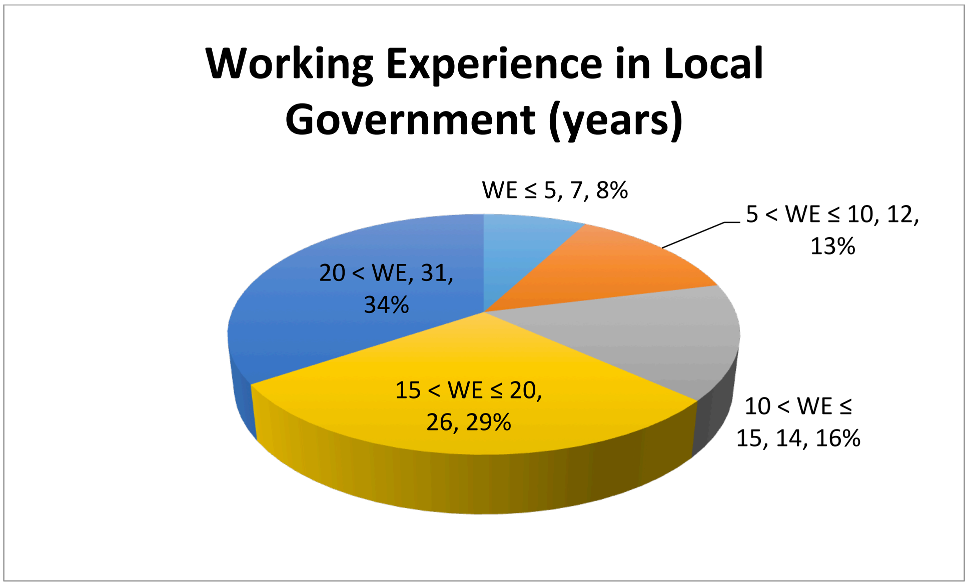

Figure 4.7: Respondents by Time in Local Government Jobs

Based on the characteristics of the respondents as illustrated above, this survey can be seen as a cross section of local government officers' understandings and perceptions of risk management.

The survey section of this chapter discusses some findings based on results of section III, IV and V of the questionnaire. Section III explores the relationship between risks and objective achievement. According the survey, a group of other risks, including technological innovation and change, political changes, reputational risks and legal risks, are identified as significant risks that affect local government in achieving the objectives. Further, responses to section IV of the questionnaire demonstrate that legal and corruption consequences are a major concern of local government officers. Furthermore, Indonesian local government finance is exposed to risks caused by weaknesses of the internal system, and political and regulatory change. Details of the findings are discussed in the following subsections.

4.2.2.1.1 Risks identified in the survey

The third section of the survey was intended to identify risks that significantly influenced local government in achieving its objectives. As described in Chapter 3, the study applied multiple regression to investigate this. Before undertaking analysis using multiple regression, the data obtained was summarized using exploratory factor analysis. This step grouped the variables so that relationships and patterns could be easily understood (Yong & Pearce, 2013). Principal axis factoring (PAF), the method of EFA used in this study, was applied to the 62 risks (dependent variables) using

IBM SPSS Version 22. The suitability of the data for factor analysis was evaluated before carrying out PAF. Evaluation of the correlation matrix showed the presence of many coefficients (Bartlett, 1954) 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 suitability of the correlation matrix for factor analysis.

The PAF exposed the existence of 11 components or factors with eigenvalues more than one that were candidates for retained factors. The 11 factors totally explain 78.40% of variance of the data. Furthermore, examining the commonalities table produced during the principal component analysis demonstrated that all variables showed values more than 0.5, which means the items fit relatively well with the other items in their component (Pallant, 2013). Therefore, this study retained all variables for analysis. During the EFA, SPSS produced a factor score for each factor. As reported by DiStefano, Zhu, and Mindrila (2009), many studies use factor scores in subsequent analysis (DiStefano, Zhu, & Mindrila, 2009), including in multiple regression analysis. Such as a study was conducted by Bell, McCallum and Cox (Bell, McCallum, & Cox, 2003). In the current study, the produced factor scores were used in regression analysis for determining relations between independent variables (level of objective achievement) and independent variables (group of risks).

Furthermore, to assist in understanding the factors/components, oblique rotation was performed. Based on pattern matrix analysis, this study retained 11 factors for subsequent investigation. According to the analysis, the factors, involved risks/variables and risk grouping/classification as presented in Table 4.3 below.

Table 4.3: Groupings of Risks

No. Group	Risks in Factor	Risks Retained	Risks Dropped	Risk grouping/classification
FACTOR 1	12	12	0	Financial managing risks
FACTOR 2	2	2	0	Operational risks
FACTOR 3	5	3	2	Shortage of resource risks
FACTOR 4	2	2	0	Human resource risks
FACTOR 5	6	4	2	Other/External risks
FACTOR 6	3	2	1	Strategic risks

No. Group	Risks in Factor	Risks Retained	Risks Dropped	Risk grouping/classification
FACTOR 7	7	7	0	Recording and reporting risks
FACTOR 8	3	2	1	Financial risks
FACTOR 9	11	7	4	Data loss and system failure risks
FACTOR 10	8	5	3	Tax managing risks
FACTOR 11	3	2	1	Terrorism and riot risks
Totals	62	48	14	

Detailed allocation of each group is presented in Table 4.4 below.

Table 4.4: Detail of Allocation of Risks to Groups

Financial managing risk	Operational risk	Shortage of resources risk	Human resources risk	Other/External risk	Strategic risk	Recording and reporting risk	Financial risk	Data loss and system failure risk	Tax managing risk	Terrorism and riot risk
Revenue target is not achieved	Fire risk	Inadequate equipment (in quantity and quality)	Frequent Employee turnover	Technology innovations/changes	Regulation changes	Transactions are not recorded in accounting system	Inflation	Loss of accounting data	Unregistered tax payer	Terrorism
Inadequate budget value	Accident in work	Inadequate document management	Shortage of employees	Political changes	Changing organizational structure, functions and job description	Accounting record is not based on adequate evidence	Changes to interest rates	Loss of budgeting data	Correspondence not received by tax payers	Riots
Less cash available in agency level		Shortage of infrastructure		Reputational risk		Inadequate evidence of accounting posting		Loss of computer data – taxpayer data	Loss of tax payer documents	
Enormous amount of unpaid tax				Legal risk		Transactions not recorded		Loss of computer data - correspondence data	Misstated tax rate	
Revenues are received late						Undetected false expenditure evidence		Failure of accounting system	Tax payer completes data improperly	
Improper account setting in budgeting process						Excess of payment		Failure of revenue information system		
Less cash/liquidity position at local government level						Local government's financial statement is not presented on time		Failure of budgeting system		
The staff are not doing their jobs										
Timeliness of budget approval										
Agencies' financial statements are not presented on time										
Timeliness of payment document completion										
Improper expenditures recording										

The dependent variable (objective achievement) and the independent variables (the 11 classifications/groups of risks) were then analyzed using multiple regression in IBM SPSS Version 22. A summary of the multiple regression results is presented in Appendix B.

The analysis through the multiple regression indicates, with a 95% level of confidence, that the risks (independent variable) explain only 18.2% of variance in local government achievement of objectives (dependent variable). This low score is understandable for the reason that the achievement of objectives in local government finance is affected by many factors other than risk. However, two groups of risks (other risks and terrorism and riots) were statistically significant in influencing the dependent variable.

Four risks relating to external factors—technological innovation and change, political changes, reputational risks and legal risks—showed a negative coefficient, meaning that increase in the risk level should decrease the level of achievement of objectives. This finding aligns with the previous discussion that corruption is still present in post-decentralization local government finance in Indonesia. This situation forces local government to use legal prosecution and raises issues of reputation. Reputational risk is a type of secondary risk that is caused by other risks (Power, 2004). In Indonesia's case, many corruption cases and the follow-on legal process are real risks that distract local government from achieving its objectives. Furthermore, the situation may lead to the perception of stakeholders that Indonesia has a corrupt public sector. It will be a reputational risk when the perception is demonstrated to the public or the world. As an illustration, according to Transparency International, Indonesia's Corruption Perception Index for 2014 is only 34 out of 100, and this puts Indonesia at number 107 of 175 countries (www.transparency.org). The index represents the perception of business people and country experts of the level of corruption in the public sector. A lower score indicates that a country has more corrupt public sector. Therefore, Indonesia's score indicates issues of reputation and may affect investment and credit rating, and, subsequently, influence local government in achieving its objectives.

Since the enactment of autonomy laws, regents/mayors and local parliament are elected directly by the public every five years. Each regent/mayor is nominated by a political party, or by coalition of some political parties. Therefore, every five years local government experiences leadership and political change (unless the regent/mayor is re-elected for a second term). According to the autonomy laws, the regent/mayor and local parliament have authority in managing local government as a whole, including financial matters. Therefore, changes in political leadership affect local government financial management. Political change is a factor that influences local government in achieving financial objectives.

Terrorism and riot risk show a positive coefficient, which was an unexpected result. This means that an increase in the risk level is expected to increase the achievement of objectives. Terrorism is a real threat for Indonesia. According to Pusponegoro (2003), between 1997 and 2002, there were 90 cases of bombings in Indonesia with 224 people killed and 340 injured. The incidents occurred nationwide and sometimes took place simultaneously. Increases in such risks triggered the establishment and implementation of policies and action to anticipate the impacts of the risks, such as the enactment of anti-terrorism laws, the establishment of an anti-terrorism agency (*Badan Nasional Penanggulangan Terorisme/BNPT*), and the development the Safe Community Program (Pusponegoro, 2003). These responses to the risk of terrorism and riots may assist local government in achieving its objectives. The positive result can also be interpreted as local government officers considering external risks opportunities more than threats. This result also confirms the neutral definition of risks in International Standard of Risk Management, ISO 31000. The standard states that the effect of uncertainty can be “positive and/or negative” (ISO, 2009, p. 1).

4.2.2.1.2 Consequences and triggers of risk in local government finance

The previous section discussed risks that affect local government in achieving objectives, based on data collected in the survey. This section explores the risk consequences relating to local government achievement and factors that possibly trigger risks in local government finance. Risk trigger factors and consequences will affect nature and level of risk, and further will influence the treatments that should be chosen for assisting in achieving the objectives. The relationship between the risk, the risk consequences, the risk factors, and the objective is illustrated in Figure 4.8 below.

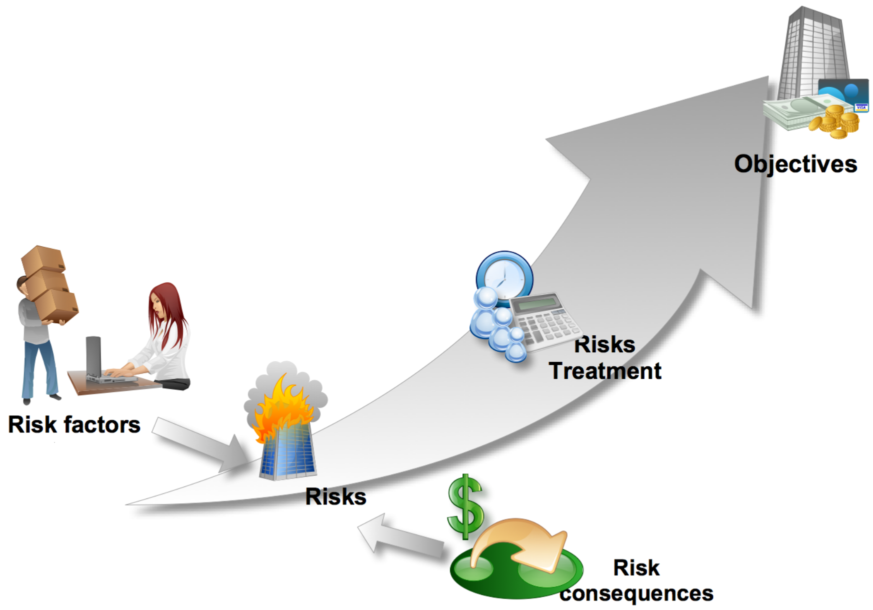

Figure 4.8: The Relationships Between Risk, Risk Nature and Objectives

4.2.2.1.2.1 Areas of consequence

Consequence is an important part of risk management because it is a factor in identifying risks that have to be treated and in determining the type of treatment to be used. Together with risk likelihood, risk consequence specifies certain levels of risk (ISO, 2009). ISO 31000:2009 defines consequences as "outcomes of an event affecting objectives" (ISO, 2009, p. 5). Further, the NSW Risk Management Toolkit indicates ten common consequence types which include 'financial, service delivery, work health and safety, community, environment, stakeholder satisfaction, reputation and image, exposure to fraud and corruption, exposure to litigation, and legal and regulatory' (NSW Treasury, 2012a, p. 48).

The current study adopts this list and uses it in order to identify areas of consequences in Indonesian local government that is mostly influenced by the risks. The respondents were asked to assess the areas of consequence in order of importance (from 1 for the most important to 10 for the least important) in affecting the achievement of local government finance objectives. The results of are presented in Table 4.5 below.

Table 4.5: Importance Level of Consequence Areas

Influenced Area	Number of Respondents	Mode/ Level	Frequency	Percentage
Financial (Loss or gain money)	90	6	21	23.33%
Service Delivery	90	6	17	18.89%
Work health and safety	90	9	21	23.33%
Community	90	8	24	26.67%
Environment	90	10	35	38.89%
Stakeholder satisfaction	90	5	23	25.56%
Reputation and image	90	4	21	23.33%
Exposure to fraud and corruption	90	2	24	26.67%
Exposure of litigation	90	3	31	34.44%
Legal and regulatory	90	1	45	50.00%

Therefore, the order of importance for consequences affecting local government objectives is:

1. Legal and regulatory.
2. Exposure to fraud and corruption.
3. Exposure to litigation.
4. Reputation and image.
5. Stakeholder satisfaction.
6. Financial.
7. Service delivery.
8. Community.
9. Work health and safety.
10. Environment.

This list demonstrates that legal and corruption consequences are of greatest concern to local government officers. This finding supports the previous discussion. Corruption is an enormous problem for local government, and aligning with BPK-RI's findings, noncompliance with regulations is a significant issue in local government finance. The finding also supports earlier findings regarding reputational risk. As mentioned earlier, corruption and legal issues can trigger reputational problems for local government. This is amplified by the ease, in the digital era, of obtaining information regarding corruption cases.

The list also indicates other interesting findings. Local government officers indicated giving less attention to environment consequences. This area ranked last on the list. Environmental issues are a serious problem. They stem "from urban living conditions, industrial pollution and deforestation" (Colombijn, 1998, p. 328). "10 million hectares of forest [were] converted to plantation in Indonesia in the past decade" (McIntyre, 2013, p. 44). It can be understood that Indonesia has many problems with environmental issues despite local government officers considering environmental issues to be less important for local government in achieving its objectives.

4.2.2.1.2.2 Internal and external risk factors

Understanding of risk events is a part of the risk identification process. ISO defines an event as the "occurrence or change of a particular set of circumstances" (ISO, 2009, p. 4). Identification of events is important because events can affect an organization in achieving objectives. Further, events with negative impacts represent risks, which require management's assessment and response (COSO, 2004b). Events can originate from sources external and internal to an organization. In general, external and internal factors can be grouped in categories as listed in Table 4.6 below.

Table 4.6: Factors of Risk Event

External Factors		Internal Factors	
Economic	Competition, market shifting, inflation	**Infrastructure**	Infrastructure cannot cope with the services anymore, in quality of quantity
Natural environment	Natural disaster, fire, environmental damage, environmental sustainability issues	**Personnel**	Lack of personnel (in quantity or quality), work accident, fraud
Political	Enactment of new regulation, new political regime, new political agenda	**Process**	Weakness and complexity in service delivery process
Social	Demography changing, changing in family structure	**Technology**	Inability in coping with new technology, implementation

External Factors		Internal Factors
	and priority	of the new system
Technological	Invention of new technology	

Source: Pedoman Risk Assessment BPKP (BPKP, 2007)

The current study adopts these categories for exploring the possibility of these factors as the source of risks, or, in other words, the factors that trigger events that influence local government in achieving its objectives, especially financial matters. The respondents were asked to assess the possibility of factors in triggering risks across five levels (Rare=1, Unlikely=2, Possible=3, Likely=4 and Almost certain=5). The results are summarized in Table 4.7 below.

Table 4.7: Factors of Risk Events According to Survey Results

The factors	Number of Respondents	Mean	Median	Mode	Frequency	Percentage
Economic and business shifts and circumstances	90	3.02	2.98	3	45	50.00%
Natural forces and events	90	2.61	2.57	2	32	35.56%
Political and regulation changes	90	3.89	3.97	4	40	44.44%
Social changes	90	3.08	3.11	3	35	38.89%
Technological innovations	90	3.36	3.36	3	43	47.78%
Condition of infrastructure	90	3.38	3.41	3	42	46.67%
Quality and quantity of human resources	90	3.91	3.91	4	44	48.89%
Technological changes and implementation	90	3.61	3.64	4	40	44.44%
Weakness and complexity of processes in service delivery	90	3.63	3.62	4	40	44.44%

As can be seen in Table 4.7, almost all of the three descriptive statistical measurements (mean, median and mode) deliver an identical value for all factors, except for “natural forces and events” (assuming use of nearest rounding up and down). These findings are interesting for a number of reasons. There are four factors that received a score of 4 (likely to trigger events). Three of these are internal to local government. This finding indicates that local government still has problems with human resources, technology implementation, and service delivery. However, the three factors are interrelated, because human resources and technology are parts of the process of local government finance. Therefore, it can be concluded that Indonesian local government finance is exposed to risks triggered by weaknesses of the system. The other factor that received a score of four was political and regulatory change. This finding supports the previous discussion of the process of decentralization, which triggered change in the political system in Indonesia. Decentralization also brought many new regulations in order to organize the new era. Therefore, it can be understood that the factors of political and regulation changes will trigger risks in local government finance.

4.2.2.2 Self-risk assessment findings

As described in Chapter 3, information about risks was also elicited through a self-risk assessment survey undertaken by those involved 15 local agencies from the three local case studies. The risk self-assessment form was used to capture the risk data, and involved risk description, objectives affected, sources of risk, consequences, and likelihood of risk. Furthermore, risk consequences and likelihood data were used to determine risk level. Risk matrices produced with Microsoft Excel were applied to analyse risk level in each of the three local case studies. Risk matrices for each local government and a description of identified risks are presented in Appendix C.

The result of the risk self-assessment questionnaire in the three case study local governments shows fascinating findings. According to these results, local government 1 (LG1), local government 2 (LG2), and local government 3 (LG3) identified 27, 39 and 21 risks respectively. The grouping of identified risks is presented in Table 4.8 below.

Table 4.8: Risks Identified in Self-Risk Assessment

Location	Level of Risk				
	Extreme	Critical	Moderate	Minimal	Total
Local government 1	1	14	12		27
Local government 2	1	22	16		39
Local government 3		5	11	5	21

Both LG1 and LG2 identified one risk in the extreme category. These risks relate to human resources. LG1 recognized that a shortage of employees significantly impacts on the achievement of objectives and needs treatment immediately. In the other case, LG2 identified frequent employee turnover as an extreme risk.

In the critical category, each local government recognized financial and fraud risks as very significant in affecting achievement of objectives and in needing treatment. They also identified legal risks, operational risks, strategic risks, human resource risks, asset related risks, and shortage of resources. Table 4.9 is a summary of the critical risks that were identified by the three local governments.

Table 4.9: Critical Risks as Identified by Case Study Local Governments

Local Government 1			Local Government 2			Local Government 3		
No	**Risks**	**Group of Risks**	**No**	**Risks**	**Group of Risks**	**No**	**Risks**	**Group of Risks**
1	Poorly skilled staff	Human resource risks	1	Improper payment request documents	Financial and fraud risks/operational risk	1	Shortage of infrastructure	Shortage of infrastructure
2	Frequent employee turnover	Human resource risks	2	Improper payment authorisation document	Financial and fraud risks/operational risk	2	Timeliness of payment document completion	Financial and fraud risks
3	Inadequate equipment (in quantity and quality)	Shortage of infrastructure/operational risk	3	Improper expenditure evidences	Financial and fraud risks/operational risk	3	Frequent Employee turnover	Human resource risks
4	Posting inappropriate account	Financial and fraud risks/operational risk	4	Loss of revenue from fines	Financial and fraud risks	4	Unqualified opinion for financial statements is not achieved	Financial and fraud risk
5	Budget is not approved as scheduled	Financial and fraud risks	5	Loss of revenue from asset renting	Financial and fraud risks/ Asset related risks	5	Poorly skilled staff	Human resource risks
6	Inadequate evidence of accounting posting	Financial and fraud risks	6	Loss of revenue from asset selling	Financial and fraud risks/ Asset related risks			
7	Transaction is not recorded	Financial and fraud risks	7	Improper account receivable recording	Financial and fraud risks			
8	Manipulation of payment and/or deposit evidences	Financial and fraud risks	8	Loss of inventory	Financial and fraud risks			
9	Failure of budgeting system	Financial and fraud risks/operational risk	9	Improper inventory recording	Financial and fraud risks			
10	Theft and misuse of assets	Financial and fraud risks/ Asset related risks/other risk	10	Financial report is not aligned to standard	Financial and fraud risks			
11	Financial reporting is not in accordance with regulation	Financial and fraud risks	11	Incomplete documentation of asset disposal	Financial and fraud risks			
12	Sub-standard output of activities	Operational risks	12	Loss of fixed assets	Financial and fraud risks/ Asset related risks			

Local Government 1			Local Government 2			Local Government 3		
No	**Risks**	**Group of Risks**	**No**	**Risks**	**Group of Risks**	**No**	**Risks**	**Group of Risks**
13	Central government's policy changes	Strategic risks	13	Contract payment exceeds real progress	Financial and fraud risks			
14	Regulation changes	Strategic risks	14	Usage of fund is not aligned with the local government regulation	Financial and fraud risks			
			15	Payment to employee is not aligned with regulation	Financial and fraud risks			
			16	Asset damage	Asset related risks			
			17	Unsatisfied services to tax payer	Operational risks			
			18	Legal risk of asset ownership	Legal risks/ Asset related 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/operational risk			
			22	Regulation changes	Strategic risks			

4.3 Conclusion

Drawing on findings from the survey of all councils and the self-risk assessment within the three case study sites, this chapter explored three aspects of risk: the factors of risk (trigger/cause of risk), risks themselves and the consequences of risk. The survey identified external risks, involving technological innovation and change, political changes, reputational risks and legal risks, that significantly affected local government in achieving the objectives. The self-risk assessment showed that employee shortage, and frequent employee turnover, were seen by respondents as extreme risks in local government. The self-risk assessment also identified that legal risk in asset ownership, investment, and procurement were considered critical risks to objective achievement.

Understanding the factors and the consequences of risk in local government assists in comprehending and treating the risks. This relationship is illustrated in Figure 4.9 below.

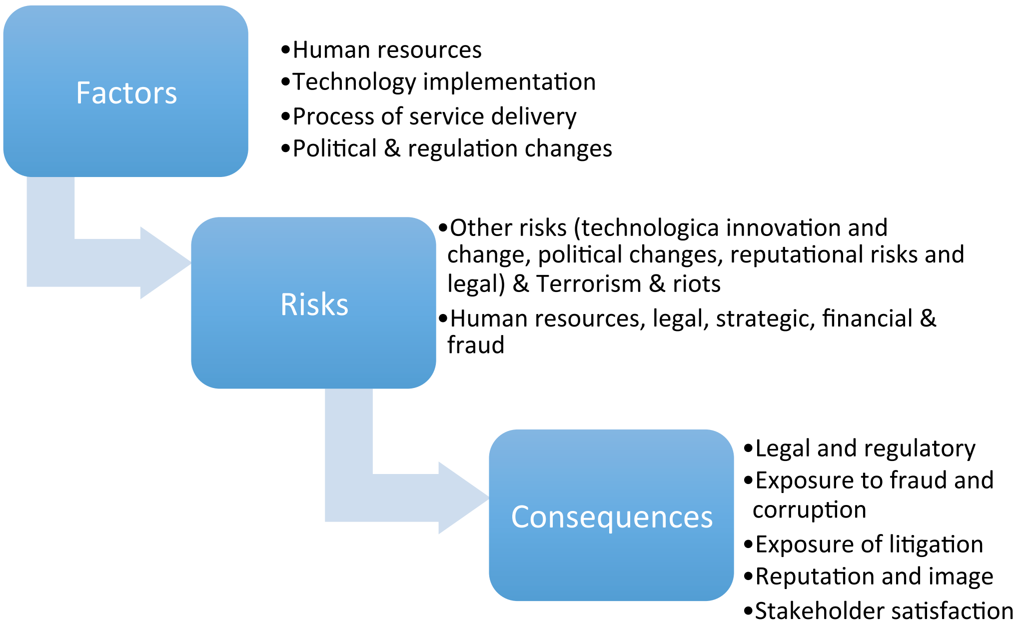

Figure 4.9: Relationship of Factors, Risks, and Consequences

Figure 4.9 indicates that there are relationships among the factors, the risks and the consequences. Identified risks are triggered and affect the related items respectively. The top five areas of consequences as identified by local government officers were legal and regulatory, exposure to fraud and corruption, exposure to litigation, reputation and image, and stakeholder satisfaction. These areas of consequence may be affected by related risks, such as technological innovation and change, political changes, reputational risks, and legal risks, as identified by survey respondents. In order to mitigate the risks, the triggering factors have to be identified and eliminated. The relation of the three components of risk in local government finance will be explored further in the next chapter.

CHAPTER 5 : RISK IN LOCAL GOVERNMENT FINANCE: A CLOSER EXAMINATION

5.1 Introduction

Previous chapters discussed risks that generally appear in Indonesian local government finance. Chapter 4 showed that external risks (technological innovation and change, political changes, reputational risks and legal risks) were significant risks in local government finance. Chapter 4 also indicated that human resource related risks (shortages of employees and frequent employee turnover) were seen as extreme risks in local government finance and need immediate treatment. As identified by respondents, fraud risk, legal risk, operational risks, strategic risks and shortage of infrastructure risk are critical risks that significantly affect local government in achieving objectives.

In order to gain a deeper understanding of risks in local government finance, this chapter describes in more detail risks in local government finance identified during interviews with respondents as part of the case studies of three local governments in Indonesia. Some results from the interviews were similar to the survey findings and risk-self assessments discussed in Chapter 4. However, other interview findings included differences that enriched this study. This chapter is organized in two sections. The first section describes the profile of the case study respondents. The second section provides further detail of the risks that appear in local government finance.

5.2 Profile of Case Study Sites

The case study data collection was conducted in Indonesia during a period from 27 April, 2014 to 7 July 7, 2014 and involved 38 respondents from three local governments and six respondents from the central government, a total of 44 respondents. The respondents were government officers from various echelons and members of local parliament (a list of interviewees is presented in Appendix D). For maintaining anonymity, each interviewee is presented in a code, both in the list and in interview quotes. In an interview quote, the code is placed in the end of the quote, and it is a three-digit number before the year number.

The composition of respondents based on their roles is illustrated in the pie chart in Figure 5.1 below.

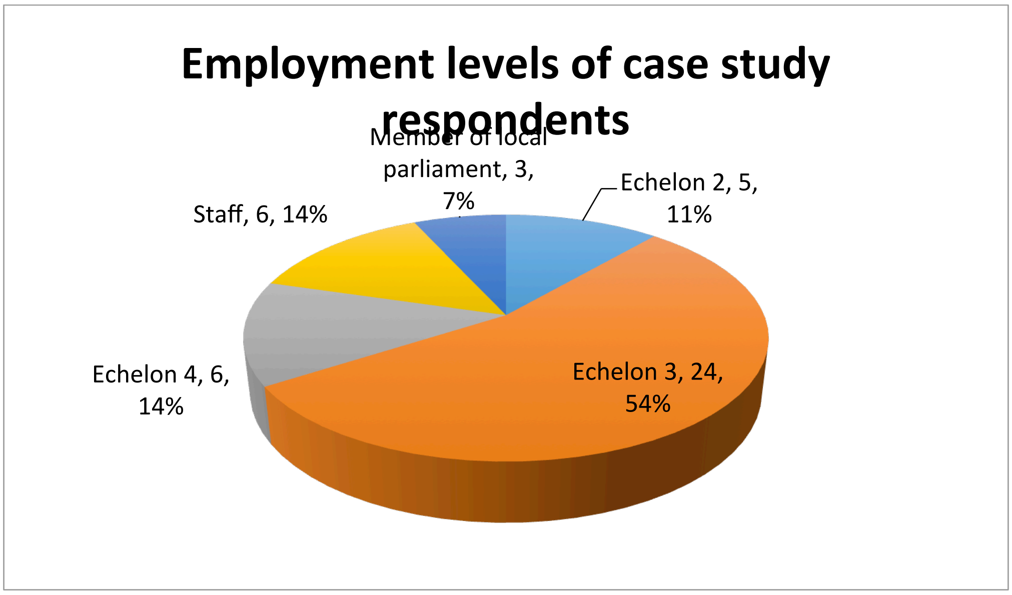

Figure 5.1: Employment Roles Respondents

The respondents also came from various agencies and institutions involved in local government financial management. Figure 5.2 below illustrates the local government finance cycle (this cycle is described in detail in Chapter 4).

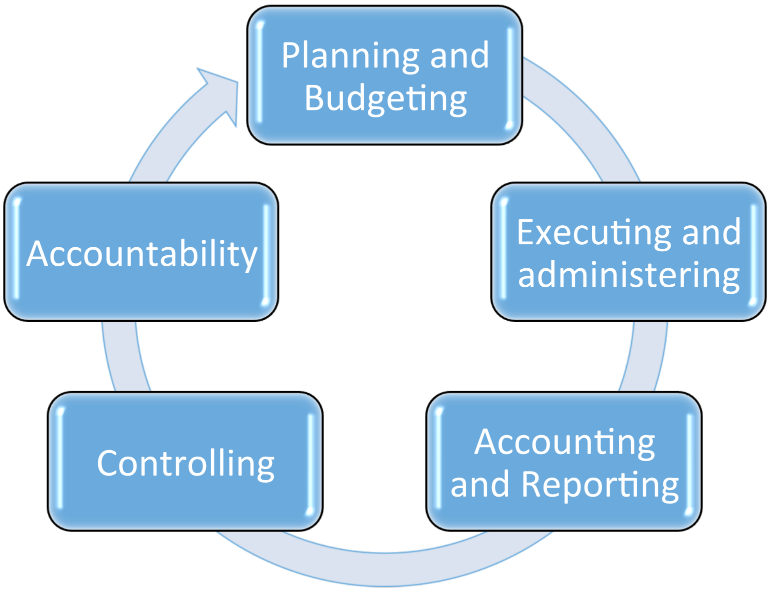

Figure 5.2: The Local Government Financial Management Cycle

Source: Summarized from Ministry of Internal Affairs Regulation Number 13/2006

The respondents came from six institutions. The areas in which they work within the institution can be grouped as described in Figure 5.3 below.

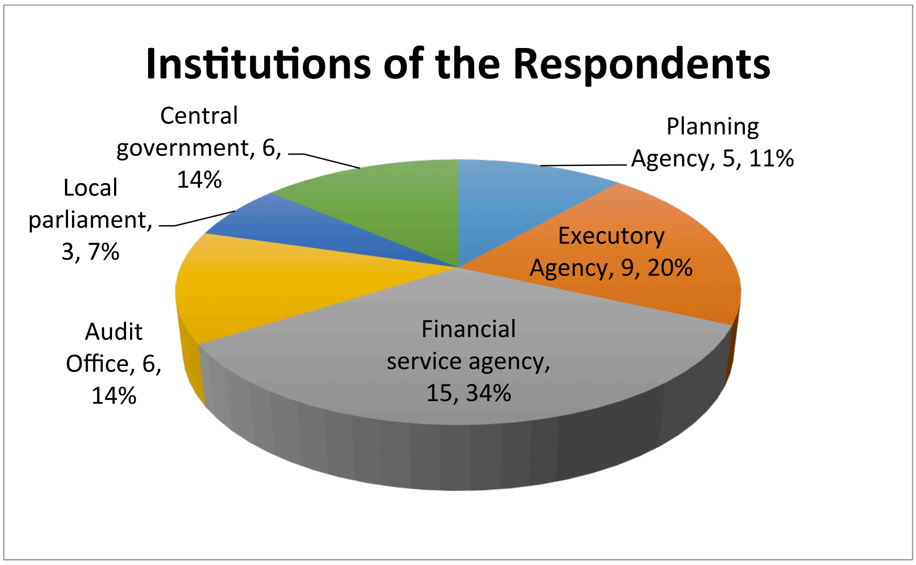

Figure 5.3: Respondents by Agency or Institution

Having respondents from across the financial cycle is desirable in order to gain a comprehensive perspective on the risks facing local government finance. The planning agency, BAPPEDA (Badan Perencanaan Pembangunan Daerah), understands the process of planning and budgeting and its risks. The implementing agency is involved in fields of services such as education, tourism, civil work, and healthcare, providing insight to this study about risks relating to budget execution. The financial service agency is a centerpiece of local government financial services. It is involved in planning and budgeting, executing, administering, accounting and reporting. The local audit office provides an overview of risk in controlling and auditing. Local parliament or DPRD (Dewan Perwakilan Rakyat Daerah) is a partner of the executive branch in running local government operations and has powerful authority in budgeting and accountability. In addition to the local government perspective, this study sought views from officials of the central government.

5.3 Deeper Insights into Risks in Local Government Finance

This section describes risks that were identified in local government finance in in-depth interviews with respondents. Some of these risks were discussed earlier in Chapter 4 as they were also identified in the survey and self-risk assessment. This chapter will discuss, in more detail, the risks, their sources and their effects on local government finance. The discussion includes the impacts of the risks on each phase of the financial cycle of local government. However, each risk does not influence every stage of the financial cycle. Each subsection below focuses on a specific risk and includes excerpts from the interviews in which the risk was discussed.

5.3.1 Organizational changes

In the previous chapter a number of risks were identified with regard to the internal organizational operations of local councils, such as planning, data systems and human resources. What emerged in the case study interviews was the impact of external organizational changes on the nature of these risks, as both the source of risks and as being affected by the consequences. As discussed in previous chapters, Indonesia's current decentralization began by enactment of a set of decentralization regulations in 1999. Since then, Indonesia's public sector has experienced constant change, including change to the organization of local government. Indonesian government structure is still evolving to find a suitable form to align with conditions extant within the nation.

Since 2009, there have been three revisions of regulation regarding the structure of local government organization. These follow from the revision of local government laws. After enactment of Law Number 22/1999 regarding regional government, the central government implemented Government Regulation Number 84/2000 regarding guidance for regional government organizations/regional bureaucracy (provincial and local). Three years later, the central government revised the regulation with Government Regulation Number 8/2003. In 2004, Law Number 22/1999 regarding regional government was revised with Law Number 32/2004. Following this change, the central government revised regional government organization with Government Regulation Number 41/2007. Form 1999 until the end of 2015, there were four revisions of laws regarding regional government (Law Number 32/2004, Law Number 23/2014, Law Number 2/2015 and Law Number 9/2015).

A significant aspect of these revisions is that they involved changes in the relationship between central government and regional governments, and changes in responsibility sharing among government levels in delivering public services. The changes affect the organizational structure of local government. The current changes are brought by enactment of Government Regulation number 18/2016 regarding regional government organization. The regulation is intended to follow up current regional government laws, and introduces categorization of local government organization as main feature (Republic of Indonesia, 2016).

As mentioned earlier, change brings with it risks (BPKP, 2007) because it affects the achievement of objectives in any organization. For our purposes in discussing risk in financial matters, changing local government organizations mainly affects the planning and budgeting steps of the financial cycle. It is captured in the following statement of a respondent:

> There was a regulation change from central government that obligated local government to change the structure of its organization, because there were some activities/duties shifted from one agency to another. It influences the function and responsibility of the agency and further affects the planning process. For example, mid-term planning was projected for 5 years. If, in the second year, there was an organizational change, it would trigger massive impact. It means that there is a need to change the mid-term plan, which takes time, for the reason that it is established based on a local government regulation and needs local parliament approval. Then, after enactment of the regulation, the organizational structure of affected agencies has to change, and personnel moved from one agency to another. (101, 2014)

5.3.2 Fiscal risk

Fiscal risk relates to uncertainty or the probability of significant differences between actual and expected fiscal performance, and in the extreme case, fiscal risk defines a "probability of sovereign default" (Kopits, 2014, p. 48). According to respondents, in the local government context, fiscal risk occurs when local governments' planned expenditures are higher than real potential revenues, especially for the transfer of funds from central government, as most local governments depend on transfer from central government. This raised by a respondent:

> Local government has a high fiscal dependency. If we look at our state budget, about one-third of our expenditure, or about IDR 600 trillion, is for regional transfer. On average, 80% of revenue of local government budget are from central government transfers. We want regional governments to reduce their dependency. (402, 2014)

One of the dilemmas is that a budget is established before the setting up of the transfer allocation by central government. As some respondents said:

> The problem arises when the allocation is smaller than that projected. The impact is that the budget would face a real deficit. (101, 2014)

> If not managed carefully, local government arguably goes bankrupt, due to an inability to finance the daily activities of local government. (207, 2014)

Examples of the severe implications were offered by two respondents from different local governments, as quoted below. If the real deficit was not solved properly, Kopits' (2014) probability of sovereign default could occur.

> It happened here when DPPKAD [Financial Service Agency] planned expenditures higher than real potential revenues of the local government, especially for the transfer funds from central government, for the reason that our local government is highly dependent on the transfer. However, the budget was established before the establishment of the transfer allocation by central government. The problem arose when the allocation was smaller than projected. The impact was that the budget faced a real deficit. Therefore, we delayed or cancelled less important programs/activities, and prioritized the important activities. The other effort was to lower the target of the activities. For example, a workshop targeted to involve 100 people was revised for 50 people in order to achieve budget efficiency. It was caused by regent and some heads of agencies, that determined targets beyond local government ability. The regent/mayor of local government is a political position, therefore image building is very important to keep his position at the next opportunity. This influences the budget with allocated expenditures on well-known public projects that are sometimes beyond the local government's fiscal ability. (101. 2014)

> . . . thus, it happened that an overestimate in revenues/funding (overestimates on last year surplus) and underestimate in expenditure (underestimates on current year allocation for multiyear projects), and it caused a budget deficit of around IDR 900 billion. The fund for the multiyear projects should be IDR 1.7 trillion, however, they provided only IDR 590 billion in the current budget. They expected that the shortage (about IDR 1.2 trillion or 1.3 trillion) would be provided in the budget revision. In fact, it was not accommodated in the budget revision, therefore it was a real deficit for the current year of about IDR 2.2 trillion. (207, 2014)

In addition to the willingness of the regent/mayor to build his or her image, as mentioned previously, this risk is also caused by a combination of ineffectiveness on the part of the local government's budget team and political intervention. These are described by a respondent:

> The risk was caused by political intervention that cannot be controlled. It was also caused by absence of self-check in the budgeting team. A critical phase of the planning and budgeting was monopolized by a team member without control from the

others. Up until now, there is no effective control of current risk, in view of the fact that it needs leadership and commitment from top. However, political intervention is too strong, influencing the leader of this local government. (207, 2014)

The other form of fiscal risk in local government is when the estimation of local revenues is smaller than its “real potential.” In other words, the situation when even if the target of local revenues in the budget is achieved, it is smaller than it should be. This risk and its cause was reported by a respondent:

The local government revenues might be estimated less than their real potential. It is caused by factors such as lack of personnel for potential identification, lack of understanding of the regulation and lack of regulation obedience. (110, 2014)

A respondent also identified a different form of fiscal risk: the tardiness of transfers from central government. There is the possibility that this risk is caused by a transfer mechanism in the banking system or local government’s incapability to fulfill the transfer requirement in alignment with regulations (403, 2014). Tardiness, especially that caused by local government itself, can affect the next transfer from central government. It can even lead to cancellation of transfer allocation if it is beyond the current fiscal year (Minister of Finance Regulation Number 183/2013) and of course risks stem from inadequate funds at the local government level.

In summary, this section has drawn out that fiscal risk can be a serious problem for local government. The occurrence of fiscal risk can cause failure of a local government to paying its liabilities and, further, it can lead to reputational risk. High fiscal dependency, desire of the mayor or regent to bolster their public image, an ineffective budget team, and political intervention are some issues that cause risk. The previous discussion regarding fiscal risk demonstrates that consequences of risk can be severe for local government finance, including sovereign default. It is surprising that the survey and self-risk assessment did not identify such risks. However, deeper exploration through some interviews demonstrated that fiscal risk is a significant risk in local government finance.

5.3.3 Delay and/or low budget disbursement

As discussed in Chapter 4, during the early period of the decentralization era (2001–2006) Indonesia had significant idle funds (Lewis, 2008) caused by an increase in central government transfers and the underestimation of shared natural resource revenue, accompanied by overestimation of spending (Oosterman & Lewis, 2009). This situation reflected unfulfilled programs or activities and was viewed as affecting the capacity of local government to deliver their services and fulfill public needs in order to satisfy constituents (Lewis, 2010). For many years, Indonesia's central government and regional governments demonstrated similar spending patterns: low budget disbursement in the first semester that piled up at the end the fiscal year. This impacted on economic growth, employment, and poverty alleviation as targeted by fiscal policy (Siswanto & Rahayu, 2010).

As evident from the comments from respondents, a similar problem still exists in local government finance, though it takes a different form and stems from different sources. Local government faces a risk of delay in budget disbursement (usually until the last months of the financial year) and, if this is not mitigated, it will result in low budget disbursement. Some respondents reported the existence of this risk:

> . . . the significant risk was the delay in the disbursement system. It affects the rhythm of the work, especially when it was a joint/share work/funding with provincial and central government. Sometimes the work was done, but we were just beginning, so we carried out the job in an odd order. It was also associated with the problem of allocation and utilization of time and coordination. It arose because there was no standard operating procedure (SOP), so what was remembered at the time, just do it. (205, 2014)

> Our actual budget capacity was about IDR 4–5 trillion in accordance with the level of our income. But in the 2012 and 2013 budget we projected IDR 7 trillion and IDR 9 trillion respectively. Why? It was caused by an inability to absorb the budget of previous years. The surplus finally became SILPA (budget surplus) and then it became a source of local government budget funding, or treated as revenue, even though the real income tended to decline . . . for example, at the moment, we allocated expenditures in the current budget of about IDR 7 trillion, but we just realized expenditure of about 9.8% of the budget, where it as at in June . . . there were only tens of projects already tendered, from hundreds of them. (208, 2014)

> Low budget disbursement is a risk caused by factors such as no applicants in the bidding process in procurements. (312, 2014)

According to the previous respondents, the risk was triggered by absence of standard operating procedures and weakness in the procurement process. Other respondents identified additional risks that might cause this situation. Lack of personnel and personnel turnover may deteriorate the quality of planning, a point made earlier. Furthermore, there is a need for budget revision in the middle of the fiscal year. The revision would delay some activities projects and programs and, therefore, delay budget absorption. Human resource problems also influence the processing of payments, and also can trigger the delay of disbursement. Relating to these issues, two respondents stated:

> Lack of personnel, and personnel turnover influence the quality of planning, therefore some planned activities could not be executed as scheduled, and sometimes require change in the budget. This process needed time. Budget revision usually was finished in July or August, and projects/activities would be started in September. So, the end of the year is the busiest time because there were a lot of jobs to be done. (106, 2014)

> Incomplete/incorrect payment documents from agencies caused repeated processing and delays the payment. It is caused by inadequate competency of the treasurer and financial manager in each agency. They were reluctant to learn about their own jobs. (303, 2014)

Legal risk is also a factor in delaying budget disbursement for the reason that it spreads fear among local government officers, as reported by the respondents below:

> . . . for example, our Public Work Agency had hundreds of projects, but until now, just a few of them were under contract. Our staffs were frightened by the legal risk. (202, 2014)

> This risk (legal risk) was so frightening, I felt that I was uneasy, however, in view of the fact that it was my job, I just did it. (203, 2014)

This section discusses low rates of budget disbursement as an important risk in local government finance. The respondents identified that problems in payment document completion, as identified as a risk in self-risk assessment, was a factor that caused delay and, further, low disbursement. The other respondents reported that legal risk could cause delay or low disbursement. Furthermore, problems related to the budget disbursement also were triggered by human resource risk, such as lack of competent people and frequent employee turnover. As discussed in Chapter 4, legal and human resource risks were also identified in the survey and self-risk assessment. These findings demonstrate that risks in local government finance do not stand alone. There are relationships among them, and this should be considered when conducting risk mitigation.

5.3.4 Legal risk

In the local government context, not complying with the law is a significant risk. Legal risk was not only identified by interview respondents, but also in the survey and self-risk assessment as discussed in Chapter 4. This risk has influence on local government officers as individuals. Directly or indirectly it also affects the achievement of the objectives of local government as an organization. Ramsay (2015) defines legal risk as:

> The extent to which the law will adversely affect the organisation from achieving its objectives, where the organisation did not consider the law, wrongly believed the law to be different, is subject to an adverse judgment that is contrary to advice received or is uncertain as to the law. (Ramsay, 2015, p. 90)

A theme common in all interviews across the three local case studies was that legal risk in local government mainly relates to the possibility of a local government officer facing legal prosecution due to corruption cases. According to Article 2 of Law Number 31/1999 and its revision, Law Number 20/2001, regarding eradication of corruption, any person who acts against the law to enrich him- or herself or other persons or a corporation that can harm state finances or the country's economy, can be accused of corruption. According to the law, a person who did not take government money could still be accused of corruption.

Legal risk frightens local government officers. The fear is not only caused by external factors, such as the enactment of corruption eradication laws and demands for transparency in the financial management of local government, but is also triggered by internal factors, such as inadequate competency in understanding and implementing regulation and other organizational practices as have been outlined above. Legal risk has significant impact, for example delaying the implementation of activities. Related to this issue some respondents state:

> These days, we cannot do our job comfortably. People are easily intimidated to make a report to a prosecutor. Somehow we thought it was too much transparency. This risk had significant impact. I would not be surprised if, for example, in mid-term planning we had 8 priority programs, but only 3 programs are finished. In coordination meetings, we have to carry out all programs, however, our staff sometimes do not have enough courage to execute them. Of course, it significantly affects achievement of objectives. For example, the Public Work Agency had hundreds of projects, but until now, just a few of them were under contract. Our staffs were frightened by the legal

> risk. (202, 2014)

> This risk [legal risk] was so frightening, I felt that I was uneasy, however, because it was my job, I just did it. (203, 2014)

Legal risk is also triggered by the current conditions in local government. As discussed in a previous chapter, in the decentralization era, local government has wider authority in managing its own money. However, this arrangement has not been followed by significant improvement in local government human resource management. The theme of human resource related risk in local government finance is discussed later. A combination of weaknesses in human resource capacities, massive addition of activities, and the scale of local government funding are all risk triggers.

Legal risks and its causes were identified by some respondents, and two examples of which are below. The first quote gives an example of legal risk and its causation, and the second respondent highlights the issues of asset use and removal and associated legal risks.

> Legal risk is a high risk. This is caused by a number of reasons. First, we manage a very large fund. Our budget for 2014 was about IDR 1.3 trillion that consisted of more than IDR 800 billion for indirect expenditure, such as salary, and more than IDR 400 billion for direct expenditure. The salary was for about 13,000 teachers spread across the local government area. We also had 600 UPB (asset users). This is remarkable, because, for example, if we needed one day to take care of one UPB, a whole year would not be enough time. Furthermore, we had various sources of funds. They came from block grant, the province's BOS [school operating fund], and other funds, all of which need to be managed and their assets and finances recorded. The likelihood of legal risk was relatively high, because the span of control was so wide. (204, 2014)

> Relating to legal risk, asset utilization may not be a significant risk, but the assets removal, either by sale or by other mechanisms, contains significant risk. For example, an asset was lost and not supported by evidence. This problem should be the user's responsibility. But when the asset was asked to be disposed, and we agreed, it looked like we legalized somebody's mistake, and their responsibility shifts to us. Though in fact, the asset did not exist, and was used by someone personally. Again it looked like legalized theft. Another case occurred with an asset disposed by sale, it would be a problem if an asset's value was not estimated properly. Our human resources have inadequate ability to carry out such activities, both in quantity and quality. I only have six staff to solve all these problems and this is too limited. Moreover, not all of our

staff had ability to cope with the problems, even to understand the basic tasks and functions. It became a constraint. This might be due to our previous recruitment mechanism, and our staffs' reluctance to improving their ability. (210, 2014)

Legal risk is the most frightening risk for a local government officer. Possible individual consequences of this risk, such as imprisonment, cause delays in the execution of activities or projects This aligns with the survey's result that legal matters and fraud consequences were in the top three as major concerns of local government officers.

5.3.5 Fraud risk

According to Power (2012), fraud risk and fraud are very different. Fraud risk is a possibility, whereas fraud is an actuality. Furthermore, Power classified sources of fraud risk into four categories. The first source is the employee, an insider. The second source is a leader that engages in misconduct against the organization, its employees and stakeholders. The third source of risk lies in the organization itself, including the capacity of both the leadership and employees to commit fraud and misconduct. The fourth source is outside parties (Power, 2012). Power's proposition regarding fraud risk sources is summarized in Table 5.1 below.

Table 5.1: Grammar of Fraud Risk

Risk source	Inside	Leadership	Organization	Outsider
Risk subject	Rogue trader	Rogue leader	Rogue organization	Rogue organizations and states
Fraud type	Insider theft, operational and trading loss	Organization used by leader as perpetrator of crime	Organization defrauds customer, stakeholders	Breach of system security
Mechanism	Manipulation of record, deceit	False accounting	Practices deviant from norms	Breach of system security
Counter practice	Internal control, segregation of duties, oversight	Corporate governance, independent director, oversight	Regulation censure, cultural change	Security system and resilience

Risk source	Inside	Leadership	Organization	Outsider
		and disclosure		
Fact production	Control facts	Governance facts	Cultural facts	Security facts

Source: (Power, 2012, p. 540)

Following Power's proposition, and as evident in the case study material, the sources of fraud risk in local government finance are commonly the local government organization and certain leaders and employees at various levels. As discussed in Chapter 4, the survey demonstrated that the fraud area of consequence was in the top three as major concern of local government officers. Further, the self-risk assessments reported some fraud risks that might take place in local government finance, such as illegal payment or usage of funds, unrecorded transactions, payment/deposit evidence manipulation, and misuse of assets. Further exploration through interview demonstrated that fraud was a significant risk in local government finance. A respondent reported an example of fraud risk that indicated a need for fraud risk management:

> . . . as far as I know, when there was a direct election, the candidate of regent or mayor definitely spent a lot of money during the general election for campaigns. They could spend IDR billions. Then once they were appointed as regent or mayor they would try to get back the money. It could be a trigger for the corruption. They tried within their five year term of office to regain their campaign funds. (403, 2014)

Further, fraud risk does not only appear in the executive branch of local government, as mentioned before, but also in the legislative branch, in this case local parliament. A respondent gives an example of this situation:

> Fake tickets was one of the auditor's findings. It meant that the person did not leave, but they bought a fake ticket. However, we just could not be sure, if we did not leave and I returned the money back, the money would be back in the local treasury. The restore procedure did not exist, not even a kind of statement letter. Therefore, we were worried if we did not leave (and without itenarary), someone would make a report to the prosecutor. So there was cheating/fraud here. Further, implementation of these activities was still weak. Someone said that the important thing was the signature/endorsement on the official travel documents. So if it was signed, it meant that the person had departed. Therefore, if it is like so, one person was enough to give

endorsement on many official travel documents, as representative of the others. They (member of parliament) also played with the projects. They offered assistance to certain local government agencies. They stated that they could help allocate budget on some projects, but they wanted reward. If the project received budget allocation, they or their colleague would be a contractor. So the biding was just a formality. (209, 2014)

Another example of fraud committed by members of local parliament is bribery. They ask for a fee to guarantee that a project is added to the local government budget, as described by a respondent:

Relating to a project, a local government experienced a deficit of billions of rupiah. It was caused by mismanagement or the desire to receive a fee from the project allocation that was ignored by local government funding. (401, 2014)

Fraud risk may occur at each stage of the local government financial cycle, from planning through to accountability. A respondent related an example of fraud risk and its form that affects the process of local government finance:

There were many possibilities of fraud in local government finance from the planning and budgeting stages until the execution stage. The agency may bribe the budgeting team for including an activity in the budget. The agency or a company may bribe a member of local parliament to include a project in the budget. A company may reduce the quality and/or quantity of its work for illegal profit. A company may bribe the supervision team to approve a subpar job. A company may bribe financial service staff for payment of its job. (401, 2014)

The fraud is caused not only by high political costs, as stated by a previously quoted respondent, but also by a mindset:

Autonomy awards freedom for local government in developing their region. However, because of limitations in human resources, they have not yet developed their region efficiently and effectively. It is a mindset. The transfer of funds from central government is not fully used for developing their region, but parts of it is corrupted. In the New Order era[1], corruption was centralized in central government, however, now corruption is also decentralized into local governments for the reason that they have

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[1] New Order refers to the reign of Indonesia's second President, Suharto, from 1966 to 1998.

> power to do it. Thirdly, local government systems have not yet run well. (403, 2014)

Obviously, the occurrence of fraud risk will cause legal problems and damage reputation. Fraud risk is not only triggered by internal factors within local government, such as mindset, but also by external factors, such as a high cost political system.

5.3.6 Risks related to asset management

According to audit results for 2014 conducted by BPK (the Audit Board of the Republic of Indonesia), local governments experienced weaknesses in asset management that impacted on their audit opinion. The results included 249 local governments that were awarded a qualified with disclaimer opinion. This meant that financial reports were presented that were not in accordance with governmental accounting standards. One of the weaknesses in the reports was related to assets. The existence of some assets was unknown or controlled by others. The assets were not supported by evidence of ownership and/or asset removal and depreciation was not recorded in accordance with regulations (BPK-RI, 2015).

The audit findings indicate that local government faces risks related to assets. According to the interviews, assets risks can be classified in two groups: those not recorded and those lost, as reported by respondents below:

> . . . A lot of our assets were not recorded. This is a problem, for example, when we wanted to use them. Were these assets legal? In fact, this asset might be OK, but based on the administration's view, we could not say that they were ours, because they were not recorded. (210, 2014)

> . . . The assets were recorded but they were missing or could not be found. Remove them from our records would also be a problem. If the assets were lost, we could not do the removal. If we would dispose them, we had to know their condition, quantity and value. The lost assets should be the responsibility of the previous users, and it must be finalised in accordance with the regulation. (210, 2014)

> The auditor could not be sure in relation to the existence of our assets, for the reason that the assets were recorded in the balance sheet, but could not be physically located. Some assets were owned by local government but without evidence. (308, 2014)

> We owned and recorded some assets, however we did not have the legal documents/evidence as a proof of ownership. (312, 2014)

These quotes support the risk-self assessment results, as described in Chapter

4, which identified some fixed asset management related risks as critical risks. These included loss of fixed assets, misuse of assets, risks relating to asset disposal, and legal risks relating to asset ownership. These risks are caused by human resource matters (quality and quantity), and mindset, as related by respondents:

> The risk was triggered by a number of factors. Firstly, we had a lack of competency in asset management. Secondly, it was a mindset that asset management was not important, so that agencies' asset management were awful. (201, 2014)

> Our personnel capacity was not good enough for handling all of the problems [relating to assets], both in quantity and quality. (210, 2014)

In addition, there were also weakness identified in the system used for managing assets. For example, the system was not integrated with other systems, as reported by a respondent:

> We need an integrated information system that can update our asset accounts automatically if there are financial transactions that influence the assets. Until now, our system is still scattered among our agencies. (109, 2014)

5.3.7 Failure of the planning system

According to Government Regulation Number 8/2008, local government planning is ideally carried out simultaneously using top-down and bottom-up approaches. A top-down approach means the translation of the vision and mission of regents/mayors into real development programs, projects, or activities. A bottom-up approach involves people and their aspirations in determining development programs, projects, and activities (Republic of Indonesia, 2008a).

In practice, the mechanism of planning does not always run well or in accordance with the ideals. Both approaches to planning bring risk for Indonesian local governments. Although the survey and self-risk assessment did not address planning risk, some interview respondents identified such risks.

> We had a problem in our planning system, especially in the bottom-up flow. There were so many proposals from sub-districts and villages relating to development planning. However, only a few of them were accommodated in local government budget. Actually, the system failure in this context did not mean that the system did not work. The system was working, but it was just a formality or normative, it was not substantive. For example, there were hundreds of billions rupiah of proposed value,

however, limitations of local government financial sources caused only a few of them to receive budget allocation. Therefore, the community tended to assume that the planning was just a formality and they became apathetic. (101, 2014)

There was a tendency of our people to propose what they wanted and did not consider the vision and mission of local government. Although the current year's priority had been realized, our people still wanted what they proposed and did not consider local government's needs as a whole. (108, 2014)

Impact of the failures in planning extends beyond the planning process itself. Weaknesses in planning can cause problems in the execution phase, such as rejection of the project, envy among communities, or more serious problems such as a failure in service delivery. A respondent reported impacts of planning risk, as below. The example of a planning failure leading to the collapse of a local bridge and subsequent isolation illustrates the significance of having in place the means to address risks:

Misalignment of planning between technocratic aspects (what we plan to do) and the people's aspirations causes rejection of projects/programs/activities. For example, we found various complaints, such as, why it was built here, when I asked for it over there. This often happens. We also could not ignore competition between communities. For example, two groups of people asked for the same projects/activities, but if it only one project was realized for a group, the other group would protest. Another example, a society proposed urgent repairs to a bridge, in view of the fact that, if not conducted in the current year, it would clearly fall. It should be budgeted in this year or the next year. Unfortunately, because of a failure of the planning system, even though it was proposed two and then three times, it did not get funding allocation in the budget. Finally, the bridge collapsed and that area became isolated, because vehicles could not get there. (208, 2014)

There is another type of planning-related risk that does not have direct impact on local government officers, and this is because the impacts of the risks are not recognized right away. It also may mean that the likelihood of the risk is not high. However, occurrence of the risk would have significant impact on local government finance or wealth of the people. Respondents report these risks:

There is a risk that the policy was false and misleading. So we did not let the policies plunge the local government into financially insolvency, nor to mislead the implementer in the field and to not make our people miserable. (107, 2014)

We had weaknesses in setting policy, such as in determining the development priority.

> There was an era when tourism was a popular focus. Our central government treated all local government as if they had same competitive advantage in tourism. Even though each region and each local government had its own potency. For example, our regency has amazing potency in plantations. However, the central government and our local government still hesitated in determining that the plantation sector was our development priority. We have focused on mining (oil, gas and coal) and forestry sectors as priority. Even though we have known that those resources will be totally depleted. If we did not exploit them all, we may have another condition. Inappropriate policy setting also affected or triggered other risk. Lots of mining activities did not meet the rules of environmental conservation. (208, 2014)

From these discussions, consequences of misleading policy and inappropriate priority cannot be ignored for the reason that they have significant and long-term impact. Policy choice is part of decision-making in local government planning. Decision-making needs data, and using data can improve the services (Maxwell, Rotz, & Garcia, 2015). The lack of availability of timely, relevant data is a cause of inappropriate policy, as related by a respondent:

> One important factor that influences appropriate policy is data. We cannot develop an appropriate policy if the data is not valid enough. The data collection is now monopolized by Central Government through BPS (Bureau of Statistic). We cannot plan without data. Furthermore, the current data is not up to date. There is a two or three year data gap. If we want to plan in 2014, we should at least have 2013 data. But actually, the available data is for 2012, and it is still only draft data. Our internal data also demonstrates similar weakness. (208, 2014)

5.3.8 Operational risks

According to the Basel Committee on Banking Supervision, operational risk is "direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events" (Basel Committee on Banking Supervision, 2001, p. 2). Further, Li and Mossa define operational risk as "the risk of (operational) losses resulting from the failure of people, processes, systems, and from external factors" (Li & Moosa, 2015, p. 2053). These two definitions associate operational risk with loss that is suffered by an entity, because the definitions were developed in a profit-oriented environment (bank and other business). However, these definitions are still relevant to the public sector, with reference to another part of the definitions, that operational risk is related to "inadequate or failed internal processes, people and systems or from external events" (Power, 2004, p. 29).

Referring to the above definitions of operational risk, the survey did not identify operational risks as significant risks in local government finance. However, the self-risk assessment identified as critical a number of operational risks including substandard output of activities, supplier risk and some type of financial risk. Existence of operational risks in local government circumstances was reported by a respondent who identified the case of preparing of an activity in a hurry, without regard to the effectiveness of the activity itself.

> First, it was not scheduled. For them, the departure was most essential, and the benefit of their departure was another matter. Whether it was important or not, the most important thing was they could go. They did not prepare a purpose for the activities. For example, activities for comparative studies, inter local government cooperation, workshops, technical guidance, and consultation. Sometimes the consultation was not programmed. In a discussion or meeting, there was a problem that could not be solved by the members of local parliament. Therefore, they decided they needed to go the day after for consultation with relevant departments. And then they just left. Furthermore, it became like a habit, if one commission left, other commissions should also be involved, even if it was not part of their job. Finally, budget's efficiency and effectiveness was not achieved. (209, 2014)

This risk is not only triggered by weakness in activity management, but also by events of other risks. Principally, the risks arose when an activity was delayed approaching the end of the fiscal year because of weaknesses of human resources, intervention, or fear of legal risk.

According to Minister of Internal Affairs Regulation Number 59/2007, each revenue and expenditure in a local government budget is classified with an account code. Mistakes in code entry affect the subsequent processes of local government finance. A respondent reported:

> In the budgeting process, error in data entry, such as inappropriate account code, was a common risk. It was a significant error in view of the fact that it could affect the process of disbursement in budget execution. The budget could not be paid. (312, 2014)

Further, a respondent identified an incapable contractor risk in procurement of local government goods and services. According to Presidential Regulation Number 54/2010 and its revisions, a supplier or contractor of a government procurement has to fulfill minimum requirements. However, the winner of a bid may not have the ability to carry out the work, as reported by respondents:

> The contractors were at risk because they might have poor management, or perhaps because of cash difficulties, so, they would influence the three components of a project (time, quality and cost) simultaneously. For example, if the contractors were short of cash, they had difficulty in funding their work, this would affect project completion, the delay would increase the overhead cost, and could impact the quality of projects because they did it hurriedly. (211, 2014)

> The risk can be triggered by intervention in the bidding process so that the winner of the bidding does not fulfil the requirements. (209, 2014)

Operational risk also includes threats to computer systems, such as the accounting system, caused by unstable power supply (206, 2014). The impacts of the risk can be in software, hardware, or databases (308, 2014). Another threat to computer systems is unauthorized access. This risk is increased because there are local governments that use a shared password for logging into the system, making it hard to identify a person who has accessed the system (206, 2014).

5.3.9 Other risks

The term "other risks" groups risks that do not directly influence local government in achieving its objectives. For example, even though it did not have direct impact on local government objectives, theft risk is a risk that may occur and could be significant. The self-risk assessment identified theft risk as a critical risk that needed treatment. An interview respondent reported that theft risk should be considered.

> Theft is a risk that cannot be ignored by local government. Some thefts occurred due to the suburban location of some local government offices. To control this risk, we assigned two security staff at night from the end of the work day until the beginning of the next work day. (101, 2014)

The Indonesian archipelago is located at the confluence of three active tectonic plates: the Indo-Australian, the Eurasian and the Pacific. Indonesia also lies on the "ring of fire" with 129 active volcanos. This makes Indonesia a country at risk of natural disaster (BNPB, 2016). In the context of local government planning, this does not have a significant and direct effect. However, natural disasters are a risk that is identified in local government finance (101, 2014). Disaster risk influences local government finances, as local government is required to provide funding for disaster relief (Republic of Indonesia, 2008b).

Massive deforestation, which has seen the conversion of more than 10 million hectares of forest to plantation in the last decade, is an example of environmental damage in Indonesia (McIntyre, 2013). The risk of environmental damage was also identified by a respondent. The respondent stated that “unlawful mining can damage the environment” (208, 2014).

5.3.10 Human resource related risk

Human resource related risks are a major risk in local government finance. Human resource related risks can be identified as lack of personnel, inadequate personnel competency and frequent personnel turnover. They are interrelated. The self-risk assessment also identified human resource related risk as very significant and respondents placed it in the extreme and critical risk categories. The interviews yielded similar results with most of those interviewed identifying human resource related risks as significant.

Some respondents said that lack of personnel (quantity of human resources) was a significant risk (101, 210, and 211, 2014). However, identification of this risk cannot be understood as an independent risk, for the reason that other respondents stated that lack of personnel is a result of inadequate staff competency (quality of human resources). One respondent said that perhaps the number of employees was enough, but the capability of these employees was the problem (214, 2014). These risks cannot be separated from another risk: frequent personnel turnover. Too often, local government experiences personnel moving from one agency to another. A change in leader (mayor/regent) is often followed by changes of personnel, and personnel being moved from one agency to another (106, 2014). This occurs even if someone is able to do their job effectively and has relevant knowledge and skills based on their educational background and experience. For example, an engineer might have skill in finance if he or she has job experience in finance. But, if staff are frequently moved from one agency to another, they do not have enough time to become skilful. Further, sometimes the new job is not in accordance with their basic knowledge (304, 2014). Therefore, this risk then triggers lack of personnel with adequate competency. The impact of staff turnover is amplified by weak recruitment mechanisms and staff reluctance to improve their ability (210, 2014). The reluctance of staff to seek improvement of their capacities is described by one respondent: “they did not have passion for improving their skill/knowledge" (303, 2014).

Human resource related risk can have serious impacts on local government financial management. For example, lack of competency in planning and budgeting processes have affects beyond the processes themselves, and ultimately affect local government performance as a whole. One respondent exemplified this:

> The human resource related risks affect all phases of the financial management cycle. In planning and budgeting processes, inadequate staff competency will be a risk for the reason that it will influence how long planning can be done and the quality of the plan. It will also affect punctuality of planning and budgeting processes. Tardiness in budget settings will influence the local government's level as rated by the Ministry of Finance. Therefore, it can cause delays of general transfers from central government. It demonstrates how important it is to manage risks in the planning process. The impact of a risk in planning can influence wide areas in local government. The risk events may occur only in one or two agencies, however if they cannot be solved, they will effect overall local government performance. (101, 2014)

During the phase of budget execution and administration, local government experiences two aspects of human resources related risks. In the context of expenditures, inadequate staff's competencies affects budget disbursement. A standard job, such as completing expenditure evidence, can be difficult if the personnel do not understand the process. The impact is that the expenditures are paid late and cause further delay in budget disbursement.

According to one respondent, this risk relates to poor understanding of staff of their own jobs, which means that sometimes they do not carry out their jobs in accordance with the current regulations. This could result in extended timelines for completion of jobs. Expenditure evidence should be processed immediately, but because of lack of understanding, the process can be delayed and cause low budget disbursement. For example, as one respondent said, "in the current stage, budget absorption should be 30–40%, but until now [June 2014] it was only about 10%" (201, 2014).

In the revenue context, local government has responsibility for managing local government revenue from taxes and levies. However, a similar risk to that mentioned above was identified. A respondent reported:

> . . . our human resources were limited. We only had one staff with education background on tax. The others had lack of competency. We might have tax application/software, but if our personnel cannot operate it, it is a problem. (110, 2014)

The same risks can be found in the accounting and reporting phase. Lack of staff with accounting and financial reporting skill, was reported by some respondents (204 and 206, 2014). Lack of personnel with appropriate competency was also reported as being a factor in the controlling phase that is realized in audits (211 and 307, 2014). Furthermore, frequent personnel turnover, in the audit context, raises the issue of independence, an important characteristic of an auditor. This point was raised by a respondent:

> It was also not just about their skill, but also about their independence. As auditor we had to have enough independence in carrying out our job, but in local government it would is an issue. How could we be independent, if the auditee someday would be our boss. For example, we conducted audits on the local government secretariat. However, indirectly, the secretary was our boss, and it put us in a dilemma for the reason that the secretary could determine our positions/roles in the local government. The secretary is the highest position under the regent/mayor. A similar case also could happen in another agency, because we could move into any agencies, and there was no guarantee we can stay in the auditor office forever. This situation will affect our jobs. (304, 2014)

Although there is a consensus among the respondents that inadequate competency is a common human resources related risk, it is important to understand the causes of this risk. As mentioned earlier, frequent staff turnover decreases the chance of staff gaining skills or knowledge for their jobs and causes a lack of competency in certain jobs. This may be exacerbated by reluctance of staff to improve their abilities. Weakness in recruitment, in first time recruitment, placement and promotion, also can cause human resource related risks. Relating to recruitment, a respondent stated:

> A grand design of HR recruitment until now has not existed. Recruitment should be conducted based on agency's needs. We hope our proposal on personnel recruitment can be fulfilled, however, I did not know about a regulation that will explicitly arrange it. (204, 2014)

In summary, human resource related risks influence each step of the local government financial cycle. They may trigger other risks, such as delayed and/or low budget disbursement, legal risks, asset related risks, and also reputational risk and ultimately affect the quality of public service delivery. Dealing with these risk can start with understanding the cause. The risk is mainly caused by frequent personnel turnover, the mindset of personnel and weaknesses of past recruitment processes.

5.3.11 Political and other intervention

As has been repeatedly emphasized, decentralization in Indonesia has been followed by the allocation of more governing authority to the local level. According to Law Number 23/2014 regarding local government, local authority is shared between local government (the regent or mayor and its apparatus) as the executive branch and the local parliament (DPRD) as the legislative branch (Law Number 23/2014). The regent/mayor and members of local parliament are elected directly by general elections. Further, a candidate for regent/mayor can be nominated by a political party or by a coalition of political parties. There is also the possibility for independent candidature (Law Number 1/2015). Because regents/mayors and members of parliament are the appointed by direct public election, as a form of popular sovereignty, both regent/mayor and local parliament have powerful authority in current decentralization era.

The powerful authority and involvement of political power can influence the work of bureaucracy and subsequently intervene in the workings of local government finance. This was considered a risk by both survey and interview respondents. As discussed in Chapter 4, the survey identified political changes as a significant risk in local government finance. The interviews had similar results. Political intervention can come from the executive and legislative branches. From the executive branch, the elected regent/mayor has enough power to assign or terminate someone from his or her position in the local government bureaucracy. The influence of regent/mayor as a political position makes the bureaucracy no longer neutral. A respondent identified this risk:

> . . . It would have an impact on the bureaucracy as well, if they took a political matter into bureaucracy it would break everything. These days, politicians can influence bureaucracy, because the regent or mayor is a political position/role. Election of regent or mayor is also influenced, because those elected bring political influence. If you did not support me in the election, even you were better and you were clever, you would

be removed, because the regent/mayor has authority to appoint and dismiss the head office and his staff. Further, the winner also would consider his supporters, although it could not be blatant. This actually interferes with their work and performance. In my opinion, it might be the highest risk for bureaucracy. It puts them in a difficult position, on one side they must be independent, but on the other side they must choose one faction. Bureaucracy is not independent anymore. (209, 2014)

From the legislative branch, the intervention of local parliament members can affect the local government financial cycle. This can occur not only in the planning and the budgeting process, but also in the execution of the budget. Local parliaments have powerful authority in setting their budgets, together with the executive, and supervision of its execution (Law Number 23/2014). However, their interventions sometimes do not comply regulation. A respondent said that:

"we facilitate the aspiration of the local parliament, but sometimes their proposals are not in accordance with our vision and mission. However, we must carry it out. The intervention becomes an obstacle that eventually affects the budgeting and its implementation. (108, 2014)

Vision and mission are a part of local government's midterm plan (RPJMD). The planning document is formalized with local government regulation that is approved by local parliament. This shows that local parliament, as the legislative branch, has a powerful bargaining position against the executive branch.

Political intervention can take place during the planning and budgeting process and also in budget execution. The respondents identified these risks, as below, and saw the lack of attention to documentation as a key source of risk:

New activities, during the drafting process of a budget, could be proposed by a mayor or a member of local parliament. However, there were no minutes or other evidence to prove that the additional activities did not come from normal planning and budgeting, but from mayor/member of local parliament. It is an example of intervention. (312, 2014)

Further examples of intervention in budget allocation process and further in its execution were reported by another respondent.

Members of local parliament could affect the process of budgeting in a way that was not accordance with regulation. For example, it really happened in a local government. Because of pressure from local parliament members, the executive planned development of some bridges, each with the same budget. However, it is almost impossible for every bridge to have the same value, for the reason that every river has different situations and conditions. Because members of local government asked for the development of bridges in their own area, and the executive did not have enough courage to refuse these demands, the local government allocated bridge development for all areas with only about half of the total development cost. As a result, the projects were executed and each bridge was only half realized. (401, 2014)

Further, the intervention of local parliamentarians also influenced the executing of revenues and expenditure. A member of local parliament should have a supervisory role in this phase and not be directly intervening, so there is a conflict of interest. The respondents below state their experiences that convey the implications of this political intervention risk:

We experienced external intervention, mainly related to our self-assessed taxes. The intervention could come from "the top" and sometimes it was from police officers. For example, today we had problem with a member of local parliament (from the same party of our mayor). He stated an unfair price (stated less price) on his property transaction due to wanting a tax reduction. (301,2014)

They (member of parliament) also played with the projects. They offered assistance to certain local government agencies. They stated that they could help allocate budget on some projects, but they want reward. If the project received budget allocation, they or their colleague would be the contractor. So the biding was just a formality. (209, 2014)

In goods/services procurement, the inspection team could not properly do their job because there was intervention from their boss. For example, an inspection report was already signed/approved by the boss, whereas the boss should be the last signature. It happened because the boss had been bribed. (401, 2014)

5.3.12 Lack of resources or systems

Decentralization drives local government to carry out more governmental affairs. According to Law Number 23/2014, local government has to organize two types of governmental affairs: mandatory and optional affairs. The regulation states that:

Mandatory affairs consist of basic and non-basic services. Basic services include education, health, civil work and spatial, housing, peace, public order, and society protection and social work. Non-basic services are listed in the Law to include affairs such as work force, women empowerment and children protection, food, land services, environment, population administration and civil registration, community and rural empowerment, population control and family planning, transportation, communication and information, cooperatives, small businesses, and medium enterprises, investment, youth and sport, statistics, culture, libraries and files. (Law Number 23/2014).

In order to carry out its affairs, local government needs resources and a system for fulfilling objectives. However, local government experiences risks relating to lack of resources and poor systems. Shortage of infrastructure was a critical risk identified in the self-risk assessment as discussed in Chapter 4. Interview results were similar. Some respondents reported that their local government faced a lack of equipment in particular phases of the financial cycle:

> Our equipment was also limited. Supposedly each staff should have enough equipment to work. We could see here, we had inadequate equipment. It was caused by limitation of our funding capacity. (210, 2014)
>
> We did not have audit tools/testing tools, especially for technical/substantive test matters. However, other equipment was enough. For example, we provide each person with a laptop. They were bought in 2011 and then in 2012, including that I use. (211, 2014)
>
> We still faced a lack of computers for processing financial and accounting data. (206, 2014)

Other respondents also identified risks relating to computer software that had not yet fulfilled their needs.

> The software was not linked automatically so that processes of budgeting, executing and accountability were not integrated. We have not been able to access the source code of the software that we use. We are still dependent on the software provider. (109, 2014)
>
> Our accounting software still has some weaknesses. It is not flexible. We cannot create certain, customisable reports that we need. Sometimes we still need manual processes. (206, 2014)
>
> We have not used computer software for managing our revenues, we did it manually. (301, 2014)
>
> We have not yet used a computer application in accounting and financial reporting. Before, we used an application, but it did not run smoothly, and it is just used for budgeting. Since early last year we have used a new system, called SIMDA [*Sistem Informasi Manajemen Keuangan Daerah*]. As I understood, the new system should be

used from budgeting until generating financial reports. However, until now, the system has not yet been established. Therefore, we still experience tardiness in financial reporting. (308, 2014)

As mentioned by the respondent above, lack of functionality in the system influences local government's punctuality in preparing financial reports. This is very important because it is obligated by regulation (206, 2014). Further, weaknesses of software are additional to weaknesses in human resources. Inadequate competency of personnel in operating the systems affects system implementation (109, 206 and 308, 2014).

5.3.13 Reputational risk

Reputation is defined as "the opinion or social evaluation of the public toward a person, a group of people or an organization" (Boatright, 2011, p. 105). Reputational risk is associated with the possibility of loss in the going concern value of an organization (Boatright, 2011). According to Power (2004), reputational risk is a secondary risk that is triggered by primary risks. In the context of reputational risk, "financially immaterial events may have huge potential significance for the organization" (Power, 2004, p. 32). Furthermore, in the public sector context, Power said that the gap between public expectation and the actual performance of government and its agencies raises a reputational risk (Power, 2004).

Considering the problems and the risks discussed earlier, such as corruption and legal problems, it can be understood that there is a gap between stakeholders' expectations and performance of the local government. Moreover, information regarding public management is contained in public documents, such as audit reports, and can be accessed by anyone. However, it is interesting that no respondent raised issues relating to reputational risk. They related fear that was caused by legal risk. They reported human resource related risks that influenced every phase of the local government financial cycle. They identified fraud risk, and low budget disbursement risk. They were also aware of risks related to failures of the planning system, which made people apathetic. Almost all of these primary risks may trigger reputational risk because if they were to happen, they would affect the performance of service delivery, which would diminish the reputation of local government. However, the respondents made no explicit statement to this effect. There are some possible explanations for this this. First, the public have not understood their rights as awarded by public service regulations (Law Number 25/2009 and Government Regulation Number 96/2012) or they may not know about the regulations. Therefore, they may rarely complain about public service performance. Second, government officers may not be aware of reputational risk, for the reason that the risk mainly influences local government as an organization and not local government staff personally.

5.4 Conclusion

This chapter has presented risks that significantly affect local government finance based on interviews during the case study. Some of the identified risks are similar to those described in Chapter 4. Political matters and legal risk are the risks that were discussed earlier as findings of the survey. Human resource related risks, fraud risk, operational risks, lack of resources and systems, and strategic risk (organizational changes) are risks that significantly affect local government in achieving its objectives and these were indicated by the self-risk assessment procedure. This chapter has enriched the discussion with deeper description of the risks involving causes and impacts of the risks as summarized in Table 5.2.

However, when discussing risks in local government finance, we should not treat them as individual risks, because the risks have interrelationships. One or more risks may trigger the others. Human resource related risks influence or cause most of other risks. Political intervention affects human resources and phases of local government's financial cycle, and further triggers other risks such as legal risks. Furthermore, all of the risks can influence the process of local government service delivery, and affect the performance of local government. The gap between local government's performance and public expectations, and almost all of identified risks, such as fiscal risk, low budget disbursement, legal risk, fraud risk, asset management related risk, operational risk, failure of planning system, human resource related risk, political and other intervention risk, and lack of resources or systems can trigger reputational risk that may have significant impact on the achievement of objectives.

Considering the interrelationships among risks, risk mitigation should treat the risks as a whole. Mitigating one risk and ignoring the others would make efforts ineffective and would trigger ongoing problem cycles. Therefore, risk management in local government should be integrative and comprehensive by considering all risk characteristics. A summary of identified risks and their attributes are presented in the table below. The table describes each risk discussed in this chapter, its description, its causes, and its impacts or consequences. The table also shows relationships among risks, such as a risk being a cause or an impact of other risk. Understanding the relationships among risks should assist in developing treatment plans as integrated efforts.

Table 5.2: Risks and their Attributes

No	Risk identified	Description	Cause/ risk source	Impact/ consequences
1	Organizational change	Organizational changes that follow changes of functions resulting from decentralization for local government as mandated by central government	Regulation changes enacted by the central government	Affecting steps of the financial cycle of local government, especially planning and budgeting, and followed by movement of personnel among agencies
2	Fiscal risk	Risk of default or temporary default that may arise in local government finance that can be triggered by overestimating the revenues and further cause overestimating of expenditures	1. High fiscal dependency of local government on central government 2. Willingness of regent/mayor to improve his/her image with allocated expenditures on well-known public projects 3. Ineffectiveness of local	1. Failure to pay for local government expenditures and liabilities 2. Reputational risk

No	Risk identified	Description	Cause/ risk source	Impact/ consequences
			government's budget team 4. Political intervention	
3	Delayed and/or low budget disbursement	Budget disbursement in the last month of the year and low disbursement of available budget until end of fiscal year	1. Lack of personnel quality and quantity and frequent personnel turnover 2. Absence of standard operating procedures Weaknesses in procurement process 3. Fear of legal risk	1. Delay and cancellation of projects or activities 2. Reputational risk
4	Legal risk	Legal risk in local government mainly relates to the possibility of local government and/or an officer facing legal problems because of corruption cases	1. Enactment of corruption eradication law and demands for transparency in financial management of local government 2. Weaknesses in human	1. Fear of legal risk can delay execution of activities. 2. Facing legal consequences 3. Reputational risk

No	Risk identified	Description	Cause/ risk source	Impact/ consequences
			resource capacities. 3. Massive addition of activities and the scale of local government funding 4. Fraud	
5	Fraud risk	Possibility of fictitious activities, bribery and other forms of fraud in local government finance	1. High political cost 2. Mindset	1. Legal problems, 2. Reputational risk
6	Asset management related risk	Risk of improper recording and loss of assets	The risk is caused by human resource matters (quality, quantity and mindset) and poor system functionality	1. Legal problems, 2. Non optimal audit results of financial reporting, 3. Financial losses 4. Reputational risk
7	Failure of planning systems, involving inappropriate policy	Risks if top-down and bottom-up approaches to planning do not run well.	1. Mismatch between bureaucracy planning and society aspiration 2. Lack of valid data	1. Ineffective development plan execution and service delivery 2. Reputational risk

No	Risk identified	Description	Cause/ risk source	Impact/ consequences
		False and misleading policy, improper prioritization of developments		3. Plunge local government into financially insolvency 4. Misleading the implementer in the field 5. Makes the people miserable 6. Causes environmental problems
8	Operational risk	Poorly prepared activities, data entry errors, incapable contractors, threats on computer systems	Delay of activity until the last months of the fiscal year, personnel capacity and lack of systems, intervention in bidding process	1. Diminishing quality of service delivery, 2. Legal problems 3. Loss of important data 4. Reputational risk
9	Other risks	Fire, theft, natural disaster, environmental damage	1. Lack of system 2. Improper policy 3. External/natural factors	1. Affecting achievement of objectives 2. Loss of asset
10	Human resource related	1. Lack of personnel 2. Inadequate personnel	1. Frequent personnel turnover	1. Delay and/or low budget disbursement

No	Risk identified	Description	Cause/ risk source	Impact/ consequences
	risks	competency	2. Reluctance of personnel to improve their capacity or mindset 3. Weakness of recruitment mechanism, including processes of placement and promotion	2. Legal problems 3. Improper recording and managing of assets 4. Affects all processes of local government financial cycle 5. Affects the quality of delivered services to the public 6. Reputational risk
11	Political and other intervention	Intervention from executive (mayor/regent) and legislative (local parliament member) that does not comply with regulation	High political cost, mental/mindset	1. Legal problems, 2. Inefficient or ineffective service delivery 3. Financial default of local government 4. Corruption 5. Reputational risk
12	Lack of resources/systems	Limitation of equipment and lack of computerized system functionality	1. Limitation of local government funding capacity 2. Lack and/or weaknesses of	1. Affects quality of delivered services, 2. Influences punctuality of

No	Risk identified	Description	Cause/ risk source	Impact/ consequences
			the software and high dependency to the software provider 3. Lack of human resource competency	financial reporting 3. Reputational risk
13	Reputational risk	Risk that are triggered by primary risks as mentioned previously	Gap between public expectation and actual performance	Trigger political risk

CHAPTER 6 : MANAGING RISK IN LOCAL GOVERNMENT FINANCE

6.1 Introduction

The focus of this thesis has so far been risks in Indonesian local government finance, their causes and consequences. As seen in the previous discussions, local governments face risks that can affect their ability to achieve their financial objectives. These risks are triggered by both internal and external factors. Internal factors include human resources, technology implementation and the process of service delivery. External factors include political interventions and regulatory changes. As outlined, an ongoing process of decentralization has triggered change in the political system of Indonesia and has led to many new regulations in order to organize this new era.

The findings of this study lend support to Beck's proposition. In the context of a world risk society, there is a perception shifting on governments' role. Government is not only seen to be an instrument of risk management, but also, as Beck writes, a source of risk (Beck, 2006). Central to this thesis is the question of what local government does to deal with risks and the consequences of risks. This chapter discusses risk management practices in Indonesian local government based on the quantitative data collected by the survey, and is the first of two chapters on this theme.

This discussion is presented in three sections. The first section explores risk management in Indonesian local government from the perspective of regulation. The section starts with a review of current regulations that relate to risk management, because in Indonesia the implementation of risk management should be mandated by regulation. This is followed by a discussion of the implementation of the regulation in local government. The second section demonstrates benchmarking of formal risk management implementation in local government in comparison with international standards (ISO 31000:2009). The third section discusses weaknesses of the current risk management system in Indonesia's local government.

6.2 Regulation View

6.2.1 Managing risks in Indonesia's regulation

The discussion begins with the notion of mandate as it is an important foundation for any implementation of risk management (ISO, 2009; NSW Treasury, 2012a). In the context of Indonesia, a mandate can be interpreted as the enactment of a government regulation, because every implementation of a new system needs a regulatory base. Before discussing risk management in light of regulations, it is valuable to understand the hierarchy of regulation in Indonesia. This understanding assists in determining the adequacy of regulation as a mandate, which is basic for risk management implementation. Risk management in local government is part of decentralization in Indonesia. Therefore, its implementation should follow the pattern set out by regulations.

6.2.1.1 Understanding Indonesia's hierarchy of regulations

Indonesia is a unitary nation. Even though local government has power to arrange its affairs based on the autonomy law, local government regulations must not be in conflict with regulation at higher levels in the regulation hierarchy. The substance of local government regulation contains autonomy arrangements and special conditions regarding local government and/or further elaboration of higher level regulation (Republic of Indonesia, 2011). Therefore, local government's arrangement of affairs has to comply and be based on guidance regarding the central government's regulations. Matters relating to the regulation hierarchy are important to understanding the position of regulations and will be discussed in current and subsequent chapters. It also gives an Indonesian perspective regarding how the system should work, for the reason that the basis of the risk management system implementation is regulation.

The hierarchy of regulation in Indonesia is illustrated in Figure 6.1 below.

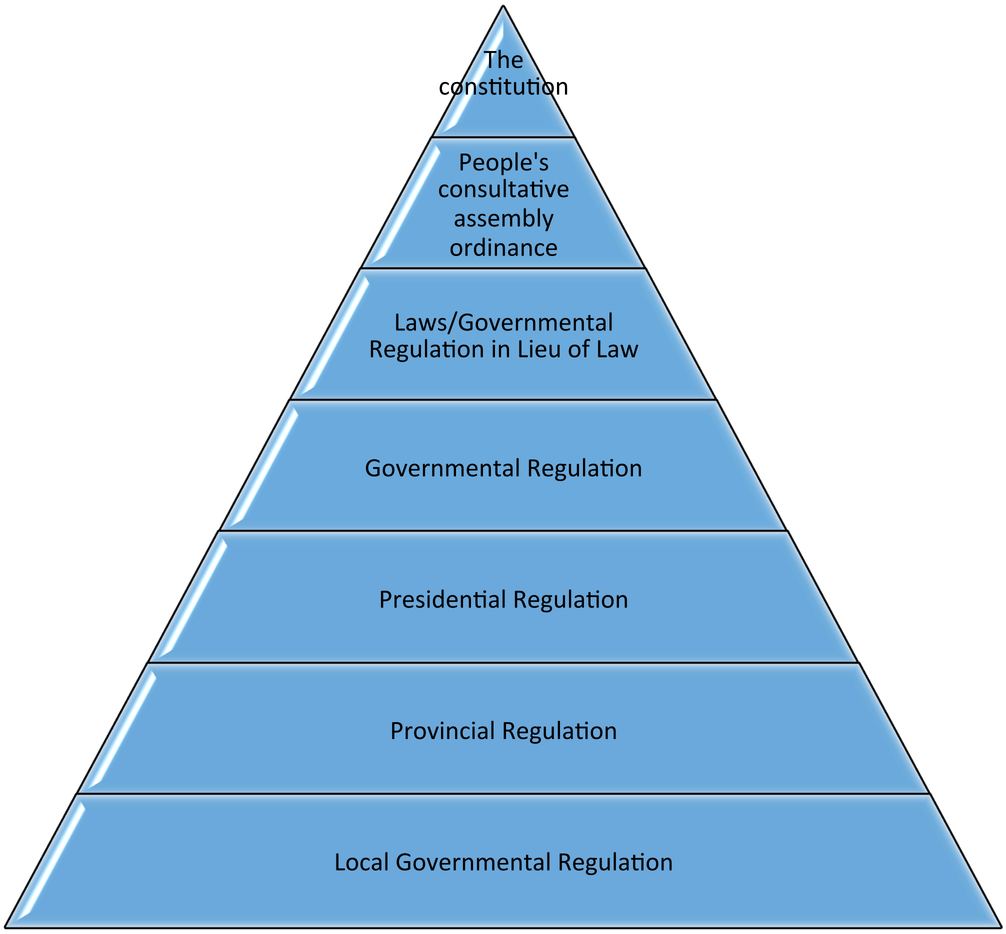

Figure 6.1: Hierarchy of Regulations in Indonesia

Source: Law Number 12/2011(Republic of Indonesia, 2011)

As seen in Figure 6–1, the Constitution of Indonesia (Undang-undang Dasar 1945) is the basic law and the highest legal authority in Indonesia. All regulations have to refer to it. According to Law Number 12/2011 regarding the formation of regulation, the origin of all regulation is Indonesia's foundation and ideology, known as *Pancasila* or five principles (Republic of Indonesia, 2011). The term *Pancasila* was proposed by Sukarno, one of Indonesia's founding fathers, in a speech delivered to the preparatory committee for Indonesia's independence (BPUPKI) on June 1, 1945 (Dwi, 2013). *Pancasila*, as a foundation of Indonesia, is stated in the preamble of the 1945 Constitution.

The second level in the hierarchy of regulation is the Ordinance of the People's Consultative Assembly (MPR). These are the decisions resulting from sessions of the Assembly. The Assembly is composed of the members of the People's Representative Council (DPR) and the Regional Representative Council (DPD).

The third level in the hierarchy is laws or government regulations in lieu of law. Law is legislation established by the DPR with the consent of the President. Government regulation in lieu of law is legislation that is established by the President in times of crisis. In order for laws to be carried out, the President establishes governmental regulations, which is the next level in the hierarchy. Below this, are presidential regulations that are set by the President for executing mandates of the higher legislation or in organizing governmental authority. Provincial regulation is legislation that is established by the provincial parliament with the mutual consent of the Governor of the province (Republic of Indonesia, 2011).

The lowest level of the hierarchy is local government regulation that is established by the local parliament (DPRD) with mutual consent of the regent or mayor. The legal force of legislation is in accordance with its position in the hierarchy. However, there are other kinds of legislation that are also recognized and have legal force through orders by higher legislation or having been formed under lawful authority, including legislation established by ministers, boards, agencies, and commissions established by law, governors and mayors or regents (Republic of Indonesia, 2011, 2014b).

The hierarchy determines the power of each level of regulation. Regulations from higher in the hierarchy are more powerful. Lower level regulations have to align with, and must not contradict, higher regulations. Furthermore, local government orders and regulations have to align with all higher levels. This nested set of regulations and the power dimensions in the hierarchy has implications for local government, which must implement the various arrangements from the various levels of regulation. For example, in relation to local government development planning, there are three levels of regulation that have to be considered, that is, Law Number 25/2004 regarding the national development planning system, Government Regulation Number 8/2008 regarding regional development planning (stages and procedures of preparation, control and evaluation of implementation), and Ministry of Internal Affairs Regulation Number 54/2010 regarding implementation of Government Regulation Number 8/2008 in the context of local development planning (stages and procedures of preparation, control and evaluation of implementation). All three of these regulations affect development planning in local government. Therefore, local government has to understand three levels of regulation in order to implement local development planning. Inevitably, this is a complicated process that may bring risks.

Further, local government, in some important matters such as internal controls, has to await guidance from a higher authority. For example, relating to internal control, Article 58 of Law Number 1/2004 regarding the state treasury states that government internal control is enacted by government regulation. The law gives no more explanation regarding the internal control. Therefore, local government has to wait for a government regulation regarding internal control. Such a government regulation regarding internal control was enacted in 2008. Therefore, for four years there was no guidance for local government regarding implementing this article of the law. Again, this obviously has an impact on the implementation of the internal control.

6.2.1.2 Regulations in local government finance

In line with the above regulatory framework, arrangements regarding local government and its finances are regulated by various levels of legislation. The main legislation related to local government is summarized in Table 6.1 below.

Table 6.1: Legislation Relating to Local Government

Legislation level	Legislation	Regarding/Arrangement
Constitution	Constitution 1945	• Basis of the local government autonomy • Mandate for establishing further arrangements via laws regarding local government and the relationship between central and local government in authority, finance, public services and natural resource usage.
Law	Law No. 1/2004	Treasury
	Law No.15/2004	State financial audit
	Law No. 17/2004	State finance

Legislation level	Legislation	Regarding/Arrangement
	Law No. 25/2004	State development planning system
	Law No. 33/2004	Financial relationship between central and local government
	Law No.28/2009	Local tax and levy
	Law No. 23/2014 and its amendments	Local government
Government regulation (GR)	GR No.58/2005	Local financial management
	GR No.55/2005	Transfer fund
	GR No. 8/2008	Regional development planning: stages and procedures of preparation, and control and evaluation of implementation
	GR No. 60/2008	Government internal control system
	GR No. 91/2010	Types of local tax that imposed under designation of mayor/regent or self-paid by taxpayers
	GR No. 71/2010	Government accounting standard
	GR No. 30/2011	Local loan
	GR No. 2/2012	Local grant
	GR No. 27/2014	Management of state/local government property
Presidential regulation (PR)	PR No.54/2010 and its amendments	Government procurement
Ministerial	MR No. 13/2006 and	Guidance for local financial

Legislation level	Legislation	Regarding/Arrangement
regulation (MR)	its amendments	management
	MR No. 17/2007	Technical guidelines for local government property management
	MR No. 54/2010	Implementation of GR No. 8/2008 regarding local development planning: stages and procedures of preparation, and control and evaluation of implementation

The list above does not cover all regulations related to the rapidly growing local autonomy in Indonesia, but includes the basic rules in regard to local autonomy arrangements. The Constitution of 1945 states that the Republic of Indonesia consists of provinces, cities and regencies and each has its own regional government. The principle of autonomy is used in the arrangement of regional government. Each regional government (province, city or regency) has its own leader and parliament, which are elected by general election (Republic of Indonesia, 1945). The arrangement awards local parliament and the local leader with powers for managing governmental affairs. This has significant effect on the implementation of the systems of local government, such a risk management system.

Further, the regulations establish a system of local government finance. They provide guidance or rules from the planning and budgeting stage to accountability processes in the local government financial cycle, as illustrated in Figure 1.2, and discussed more fully earlier in the thesis.

Financial matters are an important part of local autonomy, and their arrangements are established by various levels of regulations. All 20 regulations presented in Table 6.1 relate to the financial cycle of local government. Table 6.2 demonstrates the relationship between the regulations and particular stages of the local government financial cycle.

Table 6.2: Relationships Between Local Government Financial Cycle and Regulations

No.	Affected step of the financial cycle	Legislation	Regarding/Arrangement
1	All	GR No.58/2005	Local financial management
2	All	Law No. 17/2004	State finance
3	All	Law No. 33/2004	Financial relationship between central and local government
4	All	Law No. 23/2014 and its amendments	Local government
5	All	MR No. 13/2006 and its amendments	Guidance for local financial management
6	Planning & Budgeting	GR No. 8/2008	Regional development planning: stages and procedures of preparation, and control and evaluation of implementation
7	Planning & Budgeting	Law No. 25/2004	State development planning system
8	Planning & Budgeting	MR No. 54/2010	Implementation of Government regulation No. 8/2008 regarding local development planning: stages and procedures of preparation, and control and evaluation of implementation
9	Executing and Administering	GR No.55/2005	Transfer fund
10	Executing and Administering	GR No. 91/2010	Types of local tax imposed under designation of mayor/regent or self-paid by taxpayers
11	Executing and Administering	GR No. 30/2011	Local loan
12	Executing and Administering	GR No. 2/2012	Local grant

No.	Affected step of the financial cycle	Legislation	Regarding/Arrangement
13	Executing and Administering	GR No. 27/2014	Management of state/local government property
14	Executing and Administering	Law No. 1/2004	Treasury
15	Executing and Administering	Law No.28/2009	Local tax and levy
16	Executing and Administering	MR No. 17/2007	Technical guidelines for local government property management
17	Executing and Administering	PR No.54/2010 and its amendments	Government procurement
18	Accounting and reporting	GR No. 71/2010	Government accounting standard
19	Controlling	GR No. 60/2008	Government internal control system
20	Controlling	Law No.15/2004	State financial audit

As shown in the table above, the regulations specify arrangements for each step of the local government financial cycle. Even though the table assigns a particular regulation to a discrete step, in substance a regulation can affect other steps as well. For example, Government Regulation No. 27/2004 regarding asset/property management regulates not only execution and administration of asset management but also planning and control of asset management.

6.2.1.3 Managing risk in Indonesian regulations

Table 6.1 demonstrates that there are many regulations that relate to local government and the management of its finance. This increases the complexity of the regulatory system under which local government officers operate and, as will be explored later, this is a source of risk. However, there is a notable paucity of regulation in managing risk. From the list in Table 6.1, only one regulation, Government Regulation No. 60/2008 (*Peraturan Pemerintah Nomor* 60/2008 or PP 60/2008) regarding a government internal control system (*Sistem Pengendalian Intern Pemerintah* or SPIP), explicitly refers to managing risk formally. Article 2 of this regulation obligates the minister or head of agency, the governor and the regent or mayor to implement internal control. Furthermore, the regulation states that the internal control must have five components: control environment, risk assessment, control activities, information and communication, and monitoring. Because risk management is a component of internal control, the regent or mayor must conduct it.

Article 13 of Government Regulation Number 60/2008 states clearly that the head of a government agency is obligated to conduct risk assessment involving risk identification and risk analysis. Further, the risk identification is to use an appropriate methodology and mechanism in order to identify risks from internal and external factors. However, the regulation states that the identification can be carried out using qualitative or quantitative methods, and does not mention explicitly the particular method to be used in identifying risks. Risk analysis is intended to determine the impact of risks on government agencies' objectives. In Article 18, the regulation states that control activities must be associated with the risk assessment process. In summary, this regulation is intended to achieve effectiveness, efficiency, transparency and accountability in financial management by implementing internal control on overall government activities (Republic of Indonesia, 2008c).

The arrangements specified in the regulation are almost identical to the COSO's Internal Control-Integrated Framework (1992). COSO issued the framework as guidance about good internal control within organizations, and the framework was later recognized as the conceptual anchor to develop a strong system of internal control (Scott & Bob, 2012). The similarity between the Indonesian regulations and the COSO framework is presented in Table 6.3 below.

Table 6.3: Comparison of Indonesian Government Regulation Number 60/2008 and COSO Internal Control Framework

Point of Similarity	Indonesia Government Regulation No. 60/2008	COSO Internal Control-Integrated Framework
Definition	Internal control is a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives	Internal control is a process that is integral to the actions and activities carried out continuously by management and all employees to provide reasonable assurance in achieving the organizational objectives
Categories of objectives	• Effectiveness and efficiency of operations • Reliability of financial reporting • Compliance with applicable laws and regulations • Asset security	• Effectiveness and efficiency of operations • Reliability of financial reporting • Compliance with applicable laws and regulations
Components	• control environment, • risk assessment, • control activities, • information and communication • monitoring	• control environment, • risk assessment, • control activities, • information and communication • monitoring

Compiled from: Government Regulation No.80/2008 and COSO Internal Control-Integrated Framework

Based on these commonalities, it can be understood that the Indonesian government regulation is intended to implement an internal control system throughout government, including local government. Further, the regulation specifies a system based on integration of components into local government activities. Therefore, the regulation does not contain specific clauses pertaining to risk management. However, in its appendix, the regulation provides more detail regarding the obligations of risk assessment, including checklists for assessing effectiveness (Republic of Indonesia, 2008c).

Indonesian decentralization is arranged by aligning to the various levels of regulation described earlier. Each system in Indonesia should have a mandate from regulations, including systems that regulate local government finance. As evident from the preceding discussion, systems that are developed for conducting decentralization are complex and are regulated by many regulations at various levels. However, there is only one regulation that relates to formal risk management: Government Regulation Number 60/2008 regarding a system of government internal control (SPIP). The regulation should be a mandate to implement a system for managing risk in local government. However, considering regulation hierarchy, there is no follow-up regulation with detailed guidance for its implementation. Questions can be asked about how this will affect the effectiveness of its implementation.

6.2.2 Regulations in practice

As discussed in the previous subsections, local government has an obligation to implement internal controls, including risk assessment, and operates in a tight regulated environment. This section discusses the results of this research relating to implementation of risk assessment based on Government Regulation No. 60/2008. The discussion aims to explore existing practices of local government in managing risk that are in alignment with existing policies and regulations.

As indicted earlier, a component of the study was a survey of respondents from local governments across Indonesia. As discussed in Chapter 4, the survey had a low response with only 90 respondents or 9.16% of 982 targeted respondents from 491 targeted local governments returning a completed questionnaire. However, notwithstanding this result, the findings can be used as a signpost or indicator pointing to the implementation of risk assessment in Indonesia's local government. This section discusses results of Section II of the survey questionnaire regarding risk assessment based on PP 60/2008. The questionnaire explored the existence of risk assessment and its application. Further, it explored the existence of formal processes of risk analysis, the existence of risk criteria, the existence of risk treatment, usage of the results in decision-making, the effectiveness of risk assessment and the existence of weaknesses in risk assessment as currently conducted. The results of the survey are presented in next two subsections.

6.2.2.1 Local government level

At the local government level, only 37 respondents or 41.11% stated that their local government carried out risk assessment. This means that close to 60% do not identify their local government as engaging in risk assessment. The local governments that did not engage in risk assessment consisted of 38 regencies and 15 cities, or 60.32% and 55.56% respectively when compared with the total number of respondents in each category (regency or city). Further, 43 (59.72%) of these local governments were established before enactment of the autonomy laws with 10 (55.56%) local governments formed after the autonomy laws. In summary, approximately half of respondents in each category (regencies and cities, formed before and after autonomy laws) did not engage in risk assessment as obligated by Government Regulation Number 60/2008.

Further, as mentioned earlier, Government Regulation Number 60/2008 does not specifically state what methodology or mechanism is to be used to identify risk. It states that local government should use a proper methodology or mechanism in alignment with its own objectives, and this may be qualitative and/or quantitative. Based on the survey results, 19 (51.35%) local governments carried out qualitative risk identification, 13 (35.14%) local governments carried out quantitative risk identification, and five (13.51%) local governments used both types of methodology. The local governments that used qualitative methods were 13 regencies and six cities (52.00% and 50.00% of each category respectively). Quantitative methods were used by eight regencies and five cities (32.00% and 41.67% of each category), and there were four regencies (16.00%) and one city (8.33%) that used both types of methods.

The survey data showed, both types of local government, regency and city, use mostly qualitative methods to assess their risks. Old local governments (formed before enactment of local autonomy law) and new ones (formed after enactment of local autonomy law) mostly use qualitative methods in assessing their risks. In terms of the risk assessment method used by old local governments, 48.28% used qualitative, 37.93% used quantitative and 13.79% used both. In regard to the new local governments, 62.50% used qualitative, 25.00% used quantitative and 12.50% used both. These results are illustrated in Figure 6.3 below.

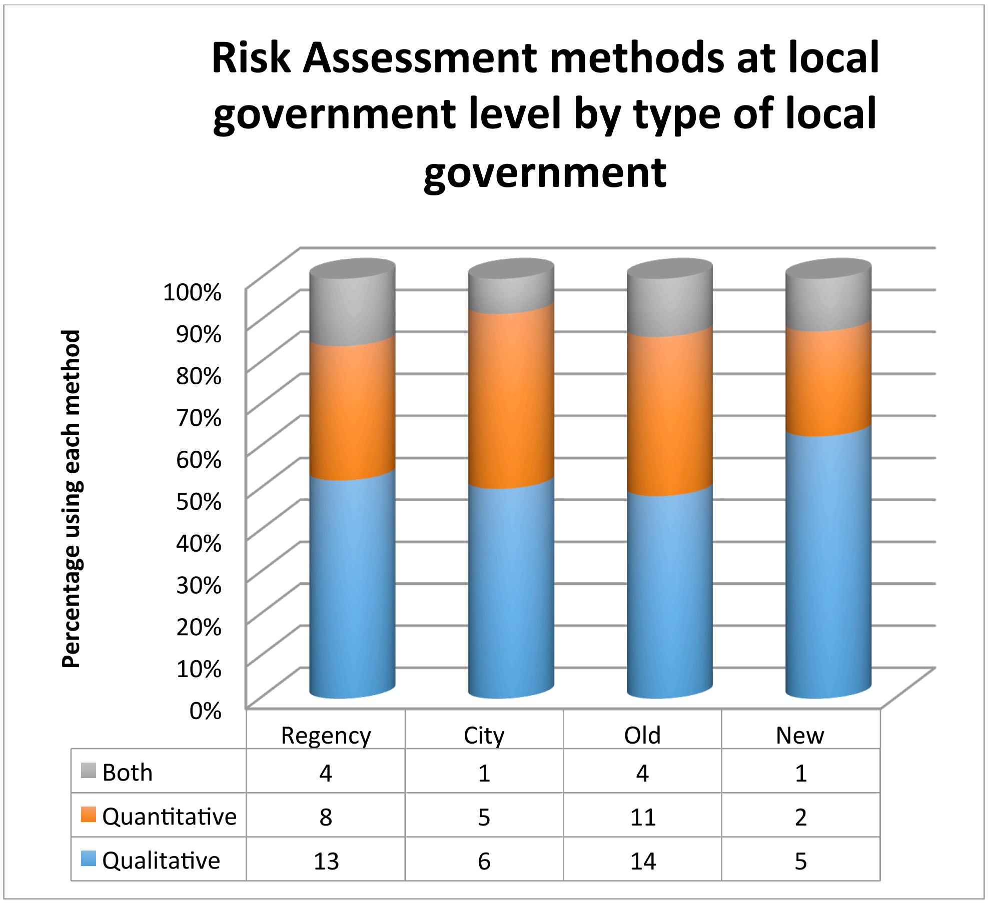

Figure 6.2: Risk Assessment Methods Used at Local Government Level by Type of Local Government

The next step of risk assessment aligning with the regulation is risk analysis. In this step, the regent or mayor has to establish a formal process for risk analysis in order to determine the potential impact of identified risks on the achievement of objectives. The regent/mayor also has to establish risk criteria for categorizing risks as low, medium or high impact. Based on the survey, 19 respondents (51.35%) stated that their regent/mayor had established a formal process for risk analysis. Of these, 16 respondents (43.24% of total respondents) indicated that their local government set risk criteria for analyzing the identified risks. This means that three local governments analyse risks without specified criteria. Further discussion relating to local government's current risk assessment is presented in Chapter 7.

The regulation also obligates local government, in the context of internal control, to determine actions or controls for managing or mitigating risks. According to the study, 31 of the 37 respondents who engaged in risk assessment reported that identified risks are treated or controlled. It is a curious finding because only 19 respondents indicated that they conduct risk analysis and three of those did risk analysis without any specific criteria on which to base their analyses. This leaves a large number of local governments treating risks without first conducting a risk analysis. It raises questions about the basis for this management of risk. This discrepancy can be understood as partially the a result of lack of awareness of the importance of risk management and taking action in regard to risks. It is demonstrated in other results. In the survey, 33 respondents (89.19%) stated that the results of risk assessments are used in decision-making. Furthermore, 32 of the 37 respondents (86.49%) who stated that their local government carried out risk assessment reported that the current risk assessment system is effective enough to assist local government in attaining their objectives. Yet, there are drawbacks in risk management without explicit criteria or analysis, and some of these issues are the subject of later discussion.

6.2.2.2 Agency level

Local government provides services that are delivered by its agencies. These can take the form of offices, units, local hospitals, and other entities. At the agency level, this study found similar results. Only 35 respondents, or 38.89%, stated that their agencies carried out risk assessment. This means that 61.11% of the agencies were not identified as engaging in risk assessment. The agencies that did not engage in risk assessment were 31 financial service agencies, 10 audit offices and 14 other service agencies. Comparison with total respondents in each category (financial service, audit and other services) yields percentages of 54.39%, 62.50% and 82.35%, respectively not performing risk assessment. It is an interesting finding. The financial service agency showed the least, and the other service agency the most, disregard for Government Regulation No.60/2008. The results may be understood as being due to local government officers considering financial matters more important than every other service. Therefore, internal controls, as mandated in the regulation, including the risk assessment component, are more likely to be carried out in the area considered most important, that is, financial services. Further, of the 35 agencies that carried out risk assessment, 18 (51.43%) performed qualitative risk identification, 12 (34.29%) performed quantitative risk identification, and 5 (14.29%) used both methodologies.

Categorized by agency type 35 respondents who indicated risk assessment was carried out in their agencies yields 26 respondents from financial services, six respondents from audit offices and three respondents from other service agencies. Respondents from the financial service and audit offices in the main indicated used qualitative methods for risk identification with 50.00% (13 respondents) from financial services and 83.00% (5 respondents) from audit offices indicating thus. However, all three respondents from the other service agencies used quantitative methods. The small sample size limits the validity of these results, but the responses do provide some indication of themes that are explored more in Chapter 7, drawing upon case study material. These risk assessment findings are illustrated in Figure 6.4 below.

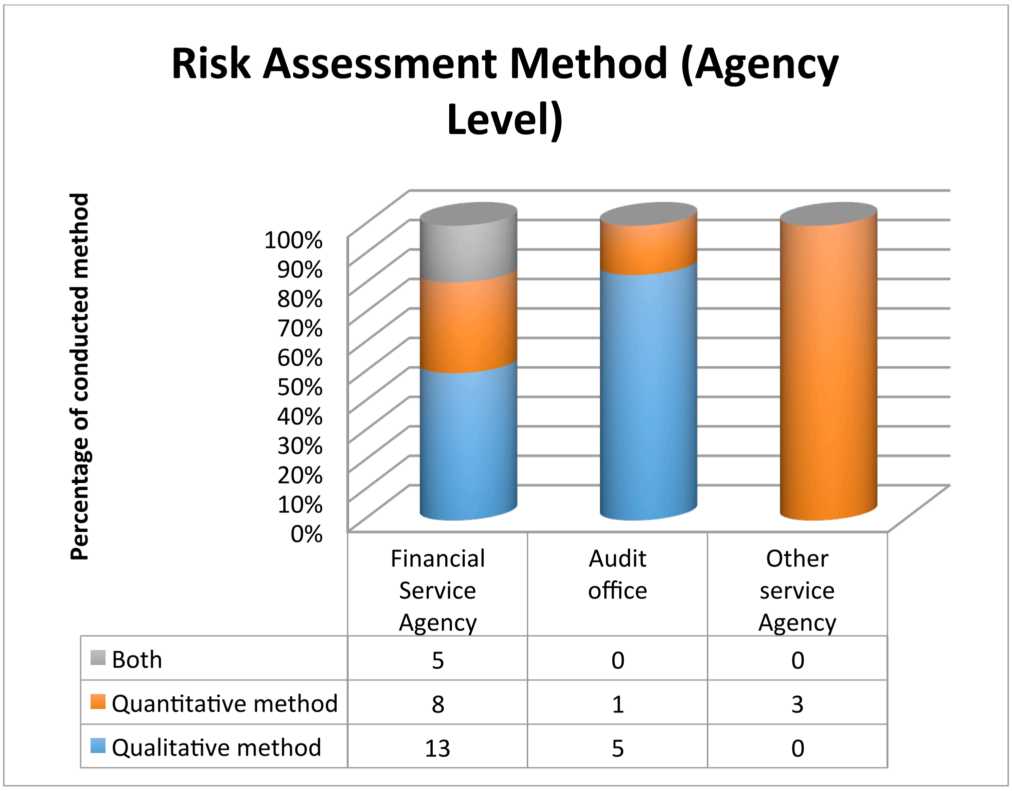

Figure 6.3: Risk Assessment Methods Used at Agency Level by Type of Agency

The next step of risk assessment, as per the regulation, is risk analysis. In this step, the head of an agency has to establish a formal process for risk analysis in order to determine the impacts of identified risks on the achievement of objectives. Heads of agency also have to establish risk criteria for categorizing risks as low, medium or high impact on achievement of agency objectives. In the survey, 17 respondents (48.57%) of the agencies that carried out risk assessment stated that their head of agency established a formal process for risk analysis. However, only 15 respondents (42.86%) indicated that their agencies set risk criteria for analyzing the identified risks. This means that there are two agencies in the study that claim to be analyzing risks but do not have pre-established criteria.

The regulation also obligates the head of agency, in the context of internal control, to determine actions or controls for managing or mitigating risks. In the survey, 29 respondents (82.86%) reported that identified risks were treated or controlled. This is similar to the findings from the responses in relation to the local government level. Most agencies stated that they treated or controlled risks. This can be understood as awareness of the importance of risk management and is demonstrated in other results from the survey. Of the respondents to the survey, 32 (91.43%) stated that results of risk assessment were used in decision-making. Furthermore, 31 respondents (88.57%) reported that the current risk assessment system was effective enough in assisting their agency in attaining their objectives. However, a majority of respondents, 33 (89.19%) from local government level and 29 (82.86%) from agency level, believed that their risk assessment methods had weaknesses.

Using ISO 31000's risk management framework, the weaknesses of risk assessment can be grouped around five components of the framework: mandate and commitment, design of framework for managing risk, implementing risk management, monitoring and review of the framework, and continual improvement of the framework. The relationship among the components is illustrated in Figure 6.5 below.

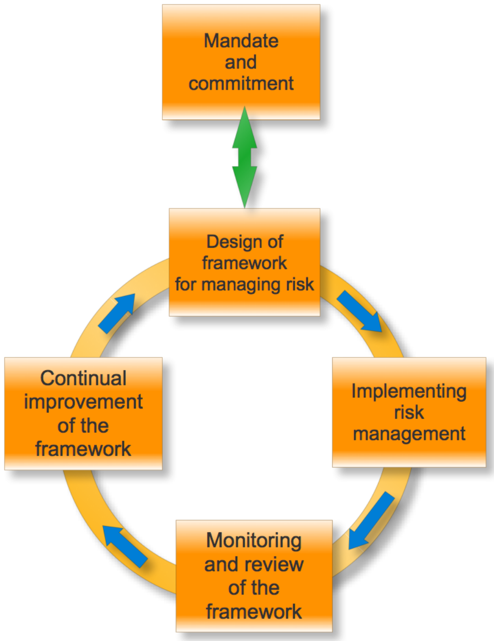

Figure 6.4: ISO 31000 Risk Management Framework

Source: ISO 31000:2009

The respondents identified weaknesses relating to mandate and commitment in their risk assessment. Lack of commitment in carrying out risk assessment, as obligated by the regulation, is the main identified weakness. Upper management (mayor/regent/head of agency) weakened the risk assessment by his/her intervention in the process. This intervention resulted in risk assessments being inconsistent. Lack of commitment was not only demonstrated by upper management, but also by staff. They paid less attention to the risk assessment process even though they had the best understanding of their own business processes. Such expertise should positively impact the efficiency and effectiveness of the risk assessment. Lack of regulation/guidance in implementing risk management, not only from the central government, but also from local government itself, is another cause of lack of commitment and mandate.

The respondents also identified weaknesses in design of the risk assessment process. Procedures of risk assessment were not prepared properly, so that local government faced a lack of procedures that aligned with current regulation. The respondents also identified that the risk assessment was based on subjective assessment, out-dated assumptions and previous year's experiences. Furthermore, they contended that current risk assessment is too complicated and difficult to understand, especially in figuring out and implementing risk variables. Further, lack of methods and data in carrying out an effective risk assessment demonstrated that the process was not well structured. All of these areas influence the effectiveness of the risk assessment itself.

Weaknesses were also found in the implementation stage. Risk assessment was only carried out for activities underway, there was no risk assessment during the activity planning process, even though planning is an important part of every activity. Lack of understanding of the regulation was also a problem in conducting risk assessment, resulting in the process not being carried out with clear guidance. Furthermore, the respondents identified that the risk assessment was not carried out with consideration of needs. Therefore, the results and their usage were not effective in assisting local government to attain its objectives. This was exacerbated by lack of follow-up actions being included the risk assessment. The respondents stated that not all local governments carried out the necessary actions after a risk assessment was conducted, for example treating or controlling the risks and/or using the assessment in decision-making processes. This made the risk assessment less effective.

The results of this study are surprising. More than five years after the enactment of the regulation, this study has found that less than half of the local governments that responded to this survey conducted risk assessment as obligated by the regulation. One factor that may have contributed to this is the lack of an adequate mandate in the regulation. There is also no single clause in the regulation that establishes sanctions for failure to comply with the regulation.

6.3 Local Government's Efforts in Managing Risk: Current Practices from an International Standards Perspective

This section discusses current practices of formal risk management in local government finance. Undertaking risk management in local government finance is not easy because of a lack of implementation guidance. As outlined above, Government Regulation No. 60/2008 provides no clauses that declare what type of risk management should be implemented, or how such implementation might occur. In the absence of such a guide, this study uses benchmarks as a base from which an examination of risk management in Indonesian local government finance can be made: ISO 31000:2009 and the NSW risk management framework for examining risk management in local government.

ISO 31000:2009 is an international standard for risk management and is used in this thesis to provide an international perspective. In summary, ISO 31000:2009 describes the principles for managing risk, the framework in which risk management occurs, and the risk management process. According to ISO 31000:2009, the 11 principles of risk management should be adhered to for risk management to be effective. The framework provides the foundation and arrangements of a risk management system and provides the basis for the risk management process (ISO 31000, 2009). The relationship of the principles, framework and process in ISO 31000:2009 is illustrated in Figure 6-6 below.

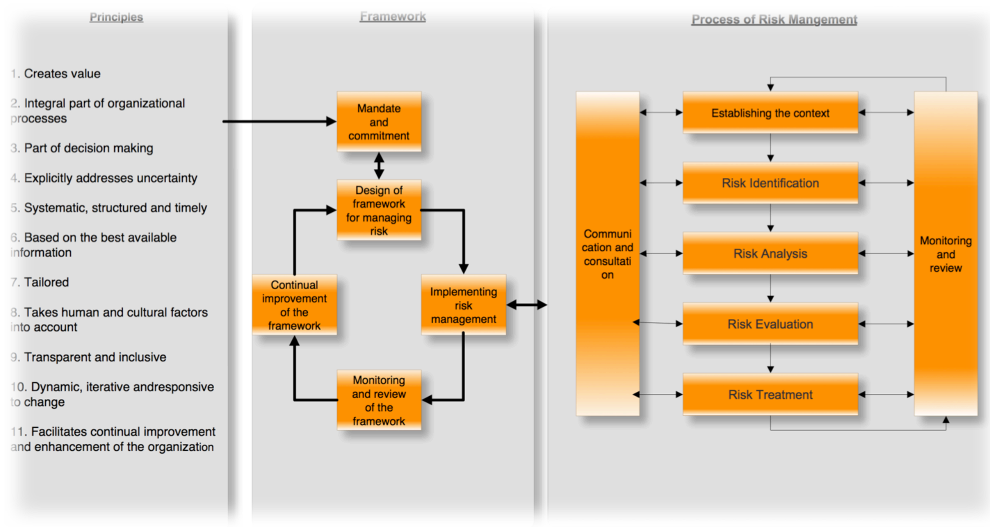

Figure 6.5: ISO's Risk Management Framework

Source: ISO 31000:2009

Aligning with ISO 31000:2009, the NSW framework describes a risk management framework that involves a risk management policy, clear risk management objectives and a mandate and commitment to risk management. Further, the NSW framework explains that the arrangement of a risk management framework includes plans for implementing risk management, building relations with stakeholders, assigning accountabilities, allocating resources, implementing a risk management process and activities for risk reporting and framework reviewing. Also, the framework provides questions for assessing whether the agency already has, or needs to put in place, these components (NSW Treasury, 2012). The components of the risk management framework, the assessing questions and the relationship with the ISO 31000 framework is outlined in Table 6.4 below.

Table 6.4: Relationships between ISO and NSW Framework

Components of Framework	Assessing Question NSW Framework	Related ISO Framework
	Foundation of risk management	
Policy	1. Does your agency have a risk management policy in place that sets out its objectives and commitment to risk management?	Mandate and Commitment
Objectives	2. Have you set clear objectives for risk management in your agency? 3. Do these risk management objectives align with your agency's overall objectives?	Mandate and Commitment
Mandate and commitment	4. Has your Head of Authority endorsed your risk management policy? 5. Have you communicated the benefits of risk management to staff and stakeholders? 6. Do you have a culture in which your staff and management are comfortable in reporting risks or suggesting risk management strategies? 7. Have you identified performance indicators that will enable you to measure how well your agency is managing risk?	Mandate and Commitment
	Arrangement of risk management	
Plans	8. Do you have an overall plan to ensure your risk management policy is implemented? 9. Do you have plans in place to	Design of framework

Components of Framework	Assessing Question NSW Framework	Related ISO Framework
	manage individual risks?	
Relationship	10. Have you communicated and consulted with your internal and external stakeholders in developing your risk management policy, plans and risk management process?	Design of framework
Accountability	11. Do all staff and management understand they have a role in managing risk? 12. Have you clearly assigned the accountabilities for your risk management implementation plan? 13. Have you clearly assigned accountabilities for managing individual risks?	Design of framework
Resources	14. Have you allocated the necessary resources to manage risk properly, including training or otherwise building staff competencies in risk management?	Design of framework
Processes	15. Is there a commonly accepted and consistent way in which risks are identified and managed in your agency? 16. Is this method integrated with your other policies, practices and processes?	Implementation
Activities	17. Does your agency have formal risk monitoring and reporting mechanisms in place so risk information is escalated to the right level in your agency? 18. Do you regularly review your agency's risk management framework to ensure it remains current?	Implementation Monitoring Continual improvement

Sources: (ISO, 2009; NSW Treasury, 2012)

For the purposes of this thesis, these questions were adapted to the context of Indonesian local government. These modified questions were a part of questionnaire that was used to survey Indonesian local governments. The results of these aspects of the survey are discussed in the subsections below.

6.3.1 Implementation of formal risk management

ISO 31000:2009 states that risk management is systematic, structured and timely and explicitly addresses uncertainty. These principles are important for the reason that they produce efficiency and consistent, comparable and reliable results of risk management (ISO, 2009). This is the reason why developing a formal risk management system is important. In this section, the study explores the implementation of formal risk management systems and frameworks in local government finance, involving both the local government level and the agency level.

According to ISO 31000:2009, risk management refers to an architecture that contains principles, framework and process. Thus, a formal risk management system will be an integrated, embedded and tailored risk management process for local government financial process across all levels and activities. The effectiveness of a risk management process can be assisted by designing, implementing, monitoring, reviewing and improving on the risk management framework based on principles of risk management (ISO, 2009). From another point of view, the head of a local government agency should formulate a risk management approach and associated control activities for minimizing risks (Republic of Indonesia, 2008c). Implementing formal risk management needs a systematic and structured process across local government financial management. It will not be easy, because the process needs clear and thorough guidance.

6.3.1.1 Local government level

The survey found that 45 respondents (50%) from the local government level and 45 respondents (50%) from the agency level answered that their organizations used a formal risk management system or framework. Both these results are not high. However, this result is surprising because, as mentioned above, the implementation of risk management in Indonesia is affected by a lack of guidance and regulation. Half of respondents stated that their local governments and agencies implemented formal risk management even though there was a lack of guidance. This invites curiosity regarding the substance of the implemented formal risk management system in Indonesia’s local government. In subsequent sections, these results will be tested using other results from the survey relating to formal risk management components.

In order to gain a better understanding, the data was also analyzed by the type of local government (regency or city) and the period of the local government formation (pre- and post-autonomy laws). Regency local governments accounted for 34 respondents (75.56%) with cities accounting for the remaining 11 respondents (24.44%) of the total 45 respondents that indicated that their local government had a formal risk management system. As a percentage of all the regencies and cities represented by the 90 respondents who returned a completed questionnaire, 53.97% of regencies (34 of 63) and 40.74% of cities (11 of 27) had some form of formal risk management system.

Local government can also be categorized by whether they were formed prior to (“old” local governments) or after (“new” local governments) the enactment of local autonomy laws (Laws No. 22/1999 and 25/1999). This division shows differences between old and new local governments in their adoption of formal risk management. For the local government level, 35 respondents (77.78%) were from old local governments and 10 respondents (22.22%) were from new. The percentages across all 90 respondents indicate that for those who responded to the survey, 48.61% of old local governments (35 of 72) and 55.66% of new local governments (10 of 18) had some form of formal risk management. These results are illustrated in Figure 6.7 below:

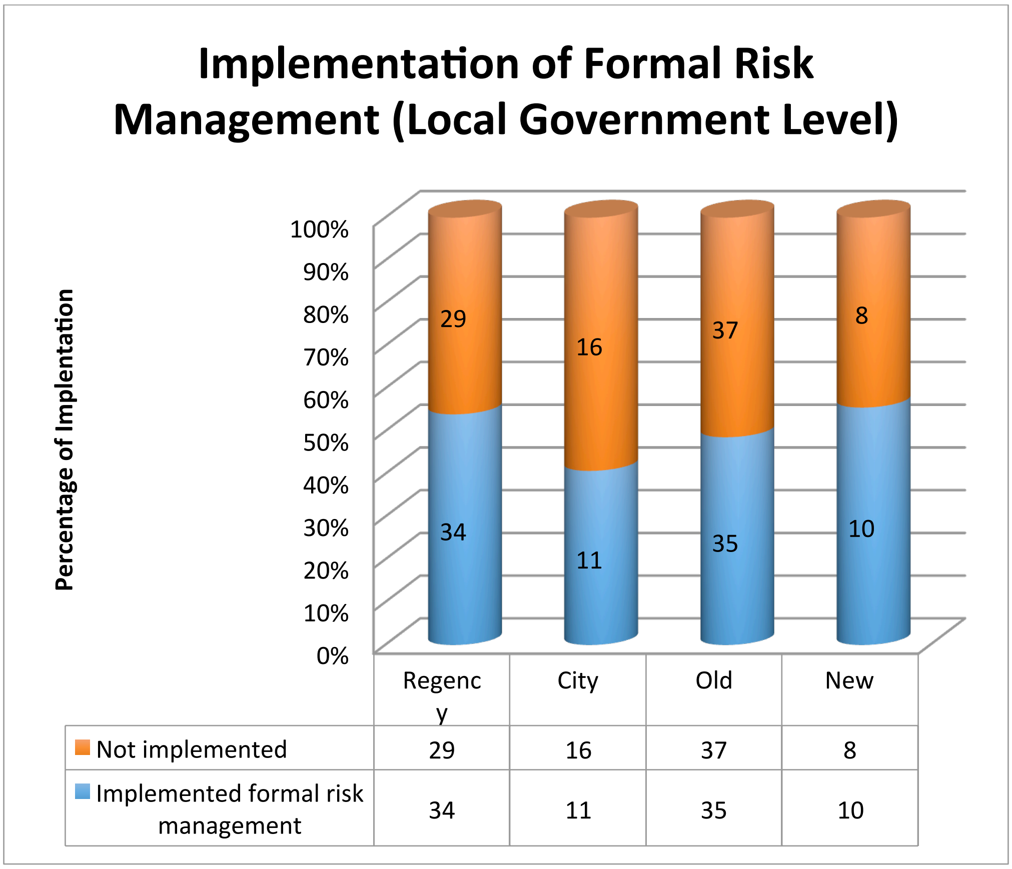

Figure 6.7: Implementation of Formal Risk Management at Local Government Level by Type of Local Government

6.3.1.2 Agency level

At the agency level, 37 respondents (82.22%) were from regencies and eight respondents (17.78%) were from cities. The percentage of the respondents who stated that their agencies implemented formal risk management compared to the total respondents per regency and city were 58.73% (37 of 63 respondents) and 29.63% (8 of 27 respondents) respectively.

Furthermore, 35 respondents (77.78%) were from old local governments and 10 respondents (22.22%) were from new ones. The percentage of respondents who stated that their agencies implemented formal risk management compared to total respondents across all old and new local governments were 48.61% (35 of 72 respondents) and 55.56% (10 of 18 respondents) respectively. These results are illustrated in Figure 6.8 below.

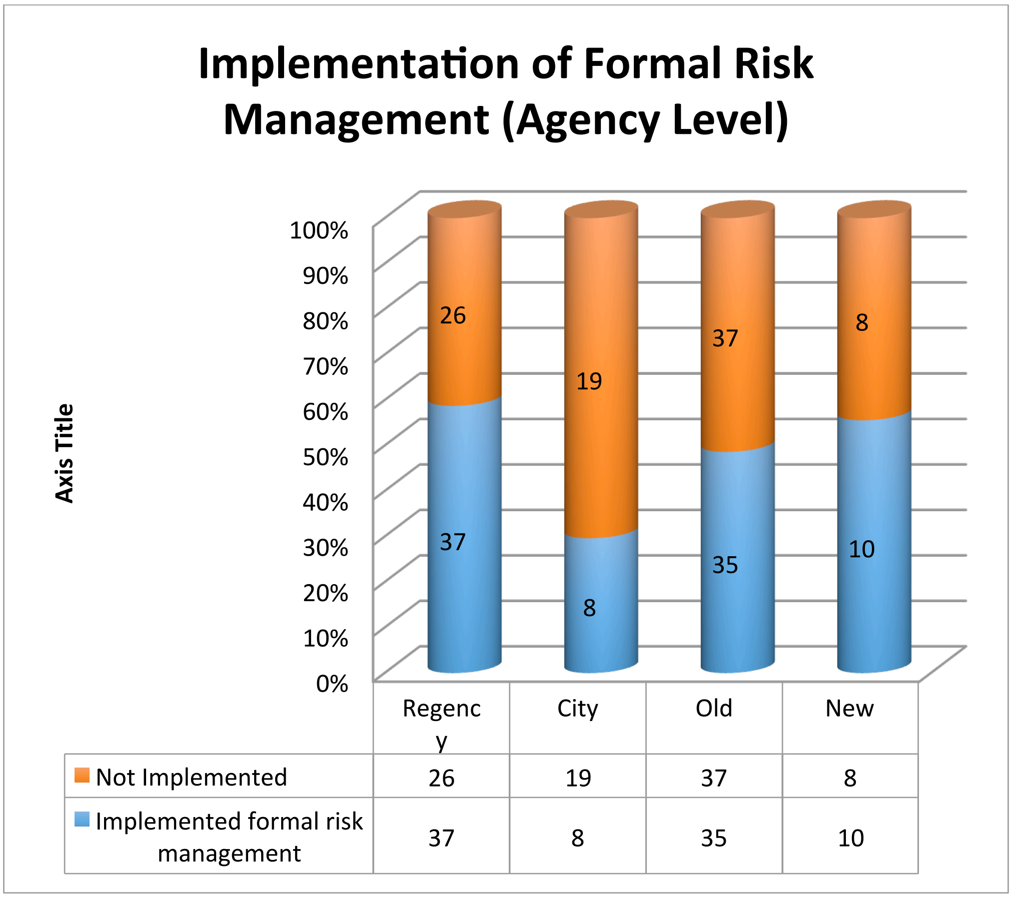

Figure 6.8: Implementation of Formal Risk Management at Agency Level by Type of Agency

To sum up, in both levels, the regency type of local government has a higher rate of formal risk management implementation than cities. The result is interesting, for the reason that regency and city types of local government have similar arrangements for conducting their financial services. They are also established based on the same regulation. However, regional characteristics of regencies and cities (for example, as rural and urban respectively) and their problems could be expected to influence adoption of formal risk management. Furthermore, across old and new local governments, about 50% implemented formal risk management. Among those who responded to the survey, both types of local government had a similar level of commitment to implementing formal risk management.

Although the rate of formal risk management implementation was relatively low in local government, most of the respondents agreed that a formal risk management system is important for local government. This is demonstrated in the results of the survey with 86% of respondents at local government level and 96% of respondents at agency level stating that formal risk management is important.

Therefore, one can conclude that there is a will for the implementation of formal risk management in local government finance.

6.3.2 The existence of formal risk management components in local government

As mentioned earlier, 50% of respondents from both the local government level and the agency level stated that their organizations used a formal risk management system or framework. According to ISO 31000:2009 and the NSW framework, formal risk management involves two major components: a foundation and an arrangement of risk management. The foundation of risk management consists of policy, objectives and a mandate and commitment to risk management. The arrangement of risk management includes plans, relationships, accountability, resources, processes and activities. The components are illustrated in Figure 6.9 below.

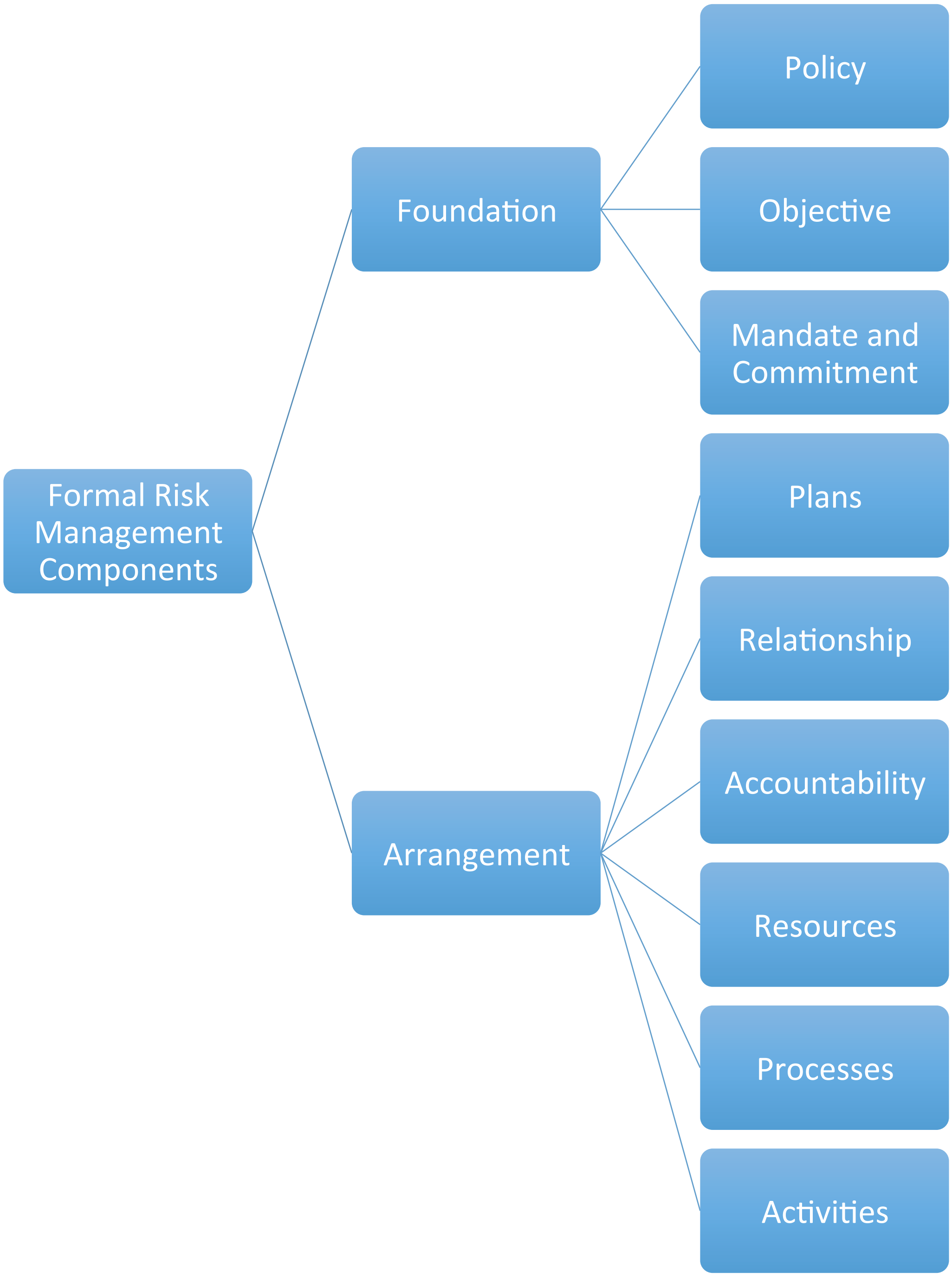

Figure 6.9: Components of ISO's Risk Management Framework

Sources: ISO 31000:2009

Using survey data, this section will examine the existence of each component in local governments that indicated the use of a formal risk management system.

6.3.2.1 Foundations of risk management

The foundation of risk management consists of three components: policy, objectives, and a mandate and commitment (NSW Treasury, 2012). The components should exist in a formal risk management as the basic components of the system. The discussion below describes the findings of the survey related to foundation of formal risk management in local government finance.

According to the survey, of the 45 respondents who stated that their local governments and agencies implemented a formal risk management, 35 respondents (77.78%) stated that their local government had a risk management policy in place that set out its objectives and commitment to risk management. At the agency level, it there was a slightly better rate with 37 respondents (82.22%) stating the same matter. The results show that not all local governments that stated that they had implemented a formal risk management system had a risk management policy. Again there is a contradiction, with a risk management system outside of any policy framework that sets out the requirements and processes for such a system. The survey responses indicate that 10 local governments (22.22%) and eight agencies (17.78%) did not have a risk management policy.

As part of the risk management foundation, local government should set clear objectives for risk management and align these with the local government's overall objectives. At local government level, 28 respondents (62.22%) stated that their local governments set clear objectives for risk management and 24 respondents (53.33%) indicated that their risk management objective was aligned with their local government's overall objectives. At the agency level, 27 respondents (60.00%) stated that their agencies set clear objectives for risk management and 26 respondents (57.78%) indicated that their agencies aligned them with overall objectives.

As argued earlier in this chapter, a mandate and commitment is important for bringing risk management to an implementation stage. A mandate could take the form of an risk management policy endorsed by the regent or mayor and heads of agencies. Commitment can be built through leadership and communication of the benefits of risk management to staff and stakeholders, so that risk management is not only implemented as a job requirement but is also based on an awareness that it is necessary and valuable. Commitment also relates to organizational culture in communicating risks and how they are managed. Further, mandate and commitment must be accounted for by measuring how well the entities manage risk through identified performance indicators. The result of the survey relating to mandate and commitment is summarized in Table 6.5 below.

Table 6.5: Components of Formal Risk Management (Mandate and Commitment)

Mandate & Commitment	LG Level		Agency Level	
Endorsement of risk management policy by regent/mayor or the agency head	30	66.67%	31	68.89%
Communicating the benefits of risk management to staff and stakeholders	32	71.11%	32	71.11%
Culture of risk management in which staff and management are comfortable in reporting risks or suggesting risk management strategies	30	66.67%	28	62.22%
Identification of performance indicators that will enable measurement of how well local government and agencies are managing risk	28	62.22%	32	71.11%

According to the survey, of the 45 respondents who stated that their local governments and agencies implemented a formal risk management, 30 respondents (66.67%) stated that the regent or mayor endorsed the risk management policy. At the agency level, 31 respondents (68.89%) stated that the head of agency endorsed the risk management policy.

There were efforts to communicate the benefits of risk management, according to 32 respondents (71.11%) at both the local government level and agency levels. At the local government level, 30 respondents (66.67%) and, at the agency level, 28 respondents (62.22%), stated that there was a culture of risk management in which staff and management were comfortable in reporting risks or suggesting risk management strategies.

One indicator of commitment to risk management is the existence of performance indicators that enable the measurement of how well a local government or agency is performing in managing risk. In the survey, 28 respondents (62.22%) at the local government level and 32 respondents (71.11%) at the agency level recorded the existence of such indicators.

The results of the survey show that there are weaknesses in the foundation of local government risk management relating to the implementation of formal risk management systems. The survey shows that not all the local governments that stated that they had implemented formal risk management had a risk management policy, set clear objectives or possessed a mandate and commitment to implement risk management.

6.3.2.2 Arrangement of risk management

The arrangement of risk management, according to the NSW framework of assessing questions, consists of six components: plans, relationship, accountability, resources, processes and activities. Comparing these components with the ISO framework shows that the components align with ISO framework processes, principally in the design of the framework, implementing risk management, monitoring and review of the framework and continual improvement of the framework. This is illustrated in Figure 6.10 below.

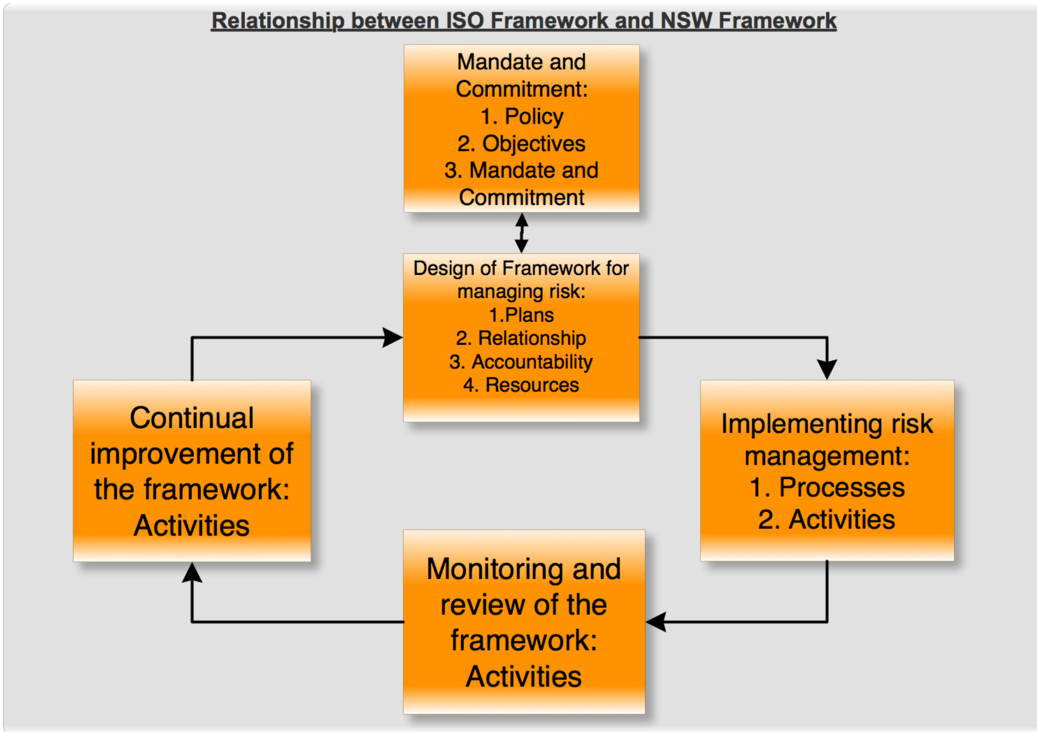

Figure 6.10: Relationship between ISO and NSW Risk Management Framework

Source: (ISO, 2009; NSW Treasury, 2012)

The arrangement of risk management in local government finance, based on this framework, is discussed in the subsections below.

6.3.2.2.1 Plans

The existence of two kinds of plans was assessed through the survey. These were an overall plan to ensure implementation of a risk management policy and plan to manage individual risks. In the survey, 27 respondents (60.00%) at the local government level and 28 respondents (62.22%) at the agency level stated that there was an overall plan to ensure that risk management policy was implemented.

With regard to the existence of a plan to manage individual risks, 31 respondents (68.89%) at the local government level and 29 respondents (64.44%) at the agency level agreed that such a plan existed. However, due to a lack of guidance and regulation on risk management for local government, there is no standard form for these plans. The form depends on the needs and maturity of the local government in implementing risk management.

6.3.2.2.2 Relationship

The relationship component assessed communication and consultation with internal and external stakeholders in developing risk management policy, plans and process. In the survey, 32 respondents (71.11%) at the local government level and 34 respondents (75.56%) at the agency level reported that there was communication and consultation with internal and external stakeholders as an intrinsic part of the risk management process.

6.3.2.2.3 Accountability

The accountability component was assessed via three aspects of risk management: the role of staff and management in managing risk, the assignment of accountability for the risk management implementation plan, and the assignment of accountability for managing individual risks. The results are summarized in Table 6.6 below.

Table 6.6: Formal Risk Management Component (Accountability)

Assessed Accountability	LG level		Agency level	
Role in managing risk	28	62.22%	27	60.00%
The accountabilities for risk management implementation plan	24	53.33%	24	53.33%
The accountabilities for managing individual risks	24	53.33%	26	57.78%

The table above shows that 28 respondents (62.22%) at the local government level and 27 respondents (60.00%) at the agency level stated that staff and management of local government understood their role in managing risks. The results also demonstrate that 24 respondents (53.33%) at both the local government and agency levels reported that accountability for the implementation of the risk management plan were clearly assigned. Finally, 24 respondents (53.33%) at the local government level and 26 respondents (57.78%) at the agency level stated that accountabilities for managing individual risks were clearly assigned. The results show that around half of local governments and agencies clearly assigned roles for managing risk, accountability in implementing the risk management plan, and managing individual risk.

6.3.2.2.4 Resources

Allocation of necessary resources is an important part of implementing risk management. It demonstrates commitment by local government to adopting the system. In the survey, 21 respondents (46.67%) at the local government level and 26 respondents (57.78%) at the agency level stated that the necessary resources were allocated for the implementation of formal risk management. This is lower than other responses and raises implications about how effective risk responses are if there are no funds allocated to implementing formal risk management processes.

6.3.2.2.5 Processes

Processes of risk management are “the faces” or “the front desk” of the system because they consist of activities that are directly undertaken to manage risks. According to ISO 31000, the process of risk management involves activities such as establishing the context, risk identification, risk analysis, risk evaluation, risk treatment, communication and consultation and monitoring and review. These are illustrated in Figure 6.11 below.

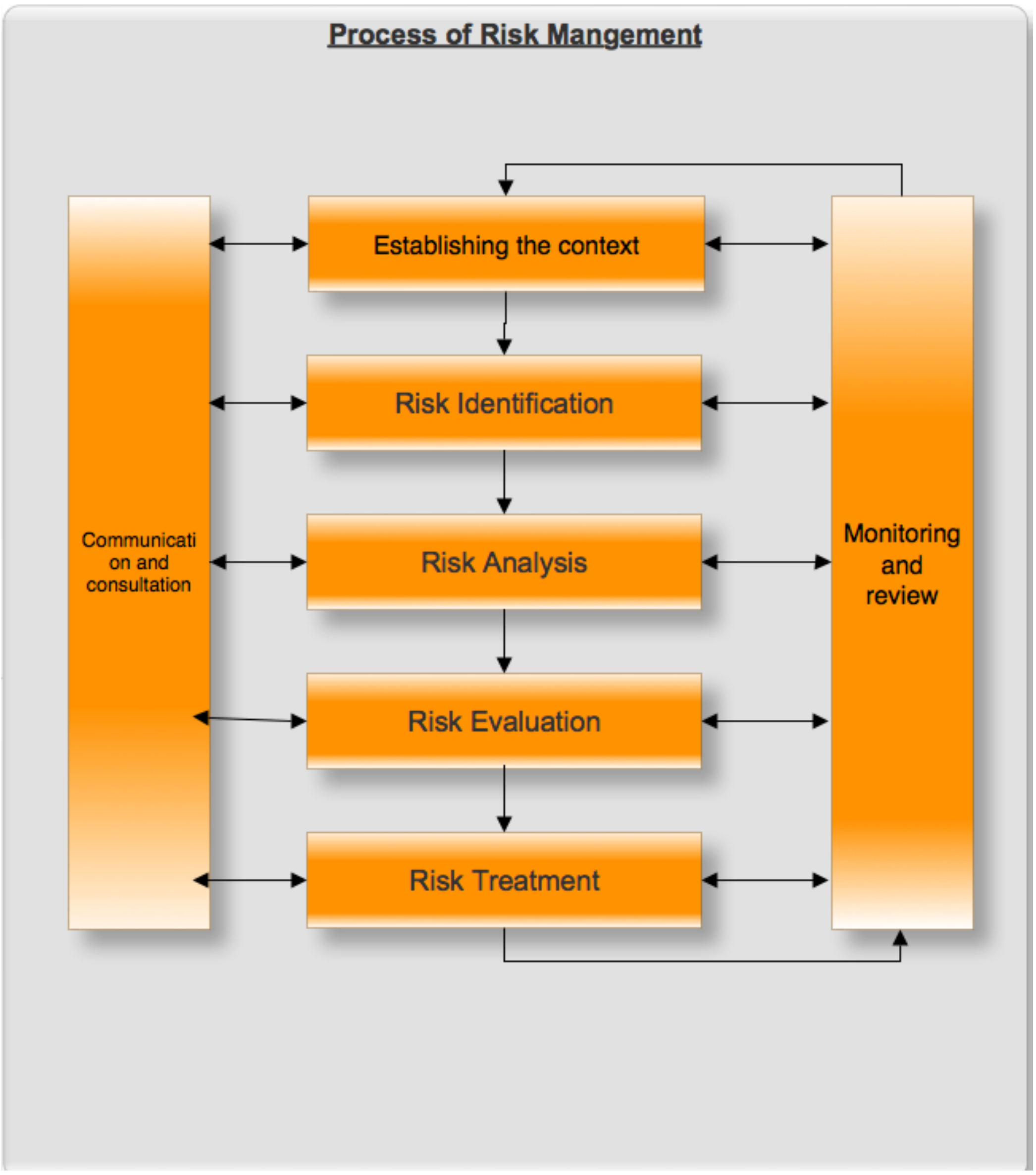

Figure 6.11: ISO's Risk Management Process

Source: ISO 31000: 2009

Two aspects of the processes were assessed in the survey: common acceptance and consistency of the process, and integration of the processes with other policies, practices and processes. In the survey, 25 respondents (55.56%) at the local government level and 30 respondents (66.67%) at the agency level stated that there was a commonly accepted and consistent way in which risks were identified and managed in local government.

With regard to whether risk management processes were integrated with other policies, practices and processes, 24 respondents (53.33%) at the local government level and 28 respondents (62.22%) at the agency level agreed that there was integration.

6.3.2.2.6 Activities

Activities in the arrangement of risk management particularly assessed the existence of formal risk monitoring and reporting and regular reviews of the risk management framework. In the survey 21 respondents (46.67%) at the local government level and 27 respondents (60.00%) at the agency level stated that their local governments and agencies had formal risk monitoring and reporting mechanisms in place and, therefore, risk information was communicated to the right level. Furthermore, 25 respondents (55.56%) at the local government level and 29 respondents (64.44%) at the agency level stated that their local governments and agencies reviewed the risk management framework to ensure it remained current.

According to these results from the survey, there are weaknesses in the arrangement of local government risk management relating to the implementation of formal risk management systems. The survey shows that not all local governments that had stated to implement formal risk management had a plan, a stakeholder relationship mechanism, or accountability arrangements regarding risk management. Further, there were local governments that had not allocated enough resources to risk management implementation, and had not established certain processes and activities relating to the implementation of risk management.

Further analysis of the response of respondents who stated that their local governments and agencies applied formal risk management (45 respondents) demonstrates that only 11 respondents or 24.44% at local government level, and 15 respondents or 33.33% at agency level reported their local governments and agencies met all specified requirements of formal risk management foundation in this survey. The survey also found that only seven respondents or 15.56% at local government level, and nine respondents or 20.00% at agency level reported that their local governments and agencies met all specified requirements of formal risk management. Furthermore, for overall components (foundations and arrangements) of formal risk management based on ISO 31000 and NSW Framework, the survey found that only six respondents or 13.33% at local government level, and seven respondents or 15.56% reported that their local governments and agencies met all the requirements.

In conclusion, the survey shows that most of the respondents reported that their local governments did not meet all requirements of applied a formal risk management.

6.4 Weaknesses of Current Practices

The discussion and results in the previous sections raise some important points. According the survey, both the regulation view and the benchmarking analysis demonstrate weaknesses of local government in managing risk. In the regulation section, respondents identified weaknesses in their current risk assessment. In the benchmarking section, there were “holes” in every component of the risk management framework in comparison to ISO 31000. Further, in the common implementation of risk assessment (regulation analysis) and risk management (benchmarking analysis) a low rate of implementation (41.11% and 50% respectively) was found. Although these two aspects include different components for assessment, they share similarities relating to weaknesses.

According to the respondents, lack of enforcement in implementing Government Regulation No. 60/2008 triggers nonconformity with it. There is no single clause in the regulation that stipulates sanctions for disobedience or violation of the regulation. This is the main cause explaining problems of low rates in risk assessment implementation. Further, the study also demonstrates that risk management, as a distinctive system, is not implemented formally. There is no legislation from central government that enforces a risk management system implementation for local government. As a result, and supported by the benchmarking analysis, there is a low rate of formal risk management in Indonesia. The lack of a mandate (enacted by regulation) is a big problem in the implementation of the system (ISO, 2009).

Furthermore, a risk management system is not formally implemented, according to this study, due to a shortage of guidance on how to implement such a system in local government finance. This is coupled with weaknesses of personnel in understanding current regulation. This explains the weaknesses (low rate of implementation) in each component of the assessment in the benchmark analysis. Implementation of a risk management system will not be uniform or adequate without formal and clear guidance.

Lack of communication regarding risk management to the staff of local government causes the benefits of risk assessment to not be well known. This causes lack of commitment in implementing risk assessment as obligated by Government Regulation No. 60/2008, because commitment is a foundation in implementing risk management (ISO, 2009). Lack of commitment impacts the implementation of the system. It is demonstrated by low achievement in almost every component of extant implementation of risk management systems in local government finance.

6.5 Conclusion

The survey demonstrates some interesting findings. Even though decentralization in Indonesia rapidly flourishes, and it is guided by extensive and expanding regulation, there is little guidance for the implementation of risk management. There is only one regulation that mentions risk management: Government Regulation No. 60/2008 regarding government internal control systems. This regulation is mainly about arranging internal controls, although there are some clauses that mention risk assessment. However, implementation of the regulation is not widespread or complete due to the lack of a mandate for the enactment of the regulation and a lack of sanctions for noncompliance with the regulation.

In comparison with international practices, the implementation of risk management in Indonesian local government has many weaknesses. As data from this research shows, no component required by ISO 31000 and NSW framework is fulfilled completely by most of involved local governments, and only about half of local governments were conducting formal risk management.

The weaknesses of current implementations of risk management can be expected to influence the effectiveness of the system itself and trigger a need to establish or develop a risk management systems and frameworks that conform with Indonesian regulation and adhere to international best practice. The focus of the next chapter is on examining these themes in more detail using findings from the three in-depth local government case studies.

CHAPTER 7 : MANAGING RISK IN LOCAL GOVERNMENT FINANCE: A CLOSER EXAMINATION

7.1 Introduction

The previous chapter discussed the findings from the survey of Indonesian local governments about their efforts in managing risk in relation to Indonesian regulation for risk management and in comparison with international standards. As discussed, only Government Regulation Number 60/2008 mentions risk management formally and this is in regard to government internal control systems. Furthermore, there are weaknesses in the implementation of this regulation across local governments and this influences its effectiveness. Benchmarking with international standards (ISO 31000:2009) indicates similar results. As discussed in Chapter 6, of respondents who stated that their local governments and agencies applied formal risk management, only 13.33% of the respondents at local government level, and 15.56% of the respondents at the agency level, reported their local governments and agencies met all the requirements of ISO 31000 and the NSW framework.

These findings raise the question of what local governments do to manage risks to support achievement of objectives, and how local government officers in councils without a policy framework deal with the inherent contradictions of managing risk in the absence of guidelines. These matters are explored more fully through a discussion of case study data from three Indonesian local governments, regarding risks that significantly affect achievement of local government financial objectives. As was outlined in Chapter 5, at least 13 risks or risk groupings that significantly influence local governments in achieving their financial objectives were identified.

One of the themes that arises from the discussion in Chapters 5 and 6 is the value of a comprehensive system for managing risks in local government finance. In other words, risk management is not conducted risk by risk, but is implemented systematically. ISO refers to risk management being "embedded throughout the organization at all levels" (ISO, 2009, p. 8).

This chapter uses the case study findings to describe efforts of local government in dealing with risks that appear in the financial process, both in reaction to individual risks and as a risk management system. The first section of this chapter discusses the efforts of local government to manage each risk individually, based on the reaction of local government to identified risks. This discussion follows the categorization of identified risks presented in Chapter 5 and is based on the results generated by the current study and from supporting literature. The second section describes the current state of local government risk management systems and their weaknesses.

7.2 Current Efforts in Controlling Risks

As has been discussed previously, Indonesian local government has limited mandate and guidance for implementing an integrated formal risk management system. The survey found that only half of respondents stated that their local government implemented formal risk management. However, this statement needs more exploration. Results from the case study of three local governments aligns with the survey findings and indicates that these local governments have not yet implemented a formal risk management system. This finding is expressed by respondents from the three local governments below:

> Risk controls are still to reaction of current problems. (101, 102, 2014)
>
> The controls were in reaction to existing risk. (111,2014)
>
> Until now, there is no formal risk management system in our agency. (214, 2014)
>
> Until now, we have not yet had a formal and standard system of risk management. (306, 2014)
>
> In our section (accounting and reporting) we have not yet implemented a formal risk management system. There are no controls. (308, 2014)
>
> We have not yet had a formal risk management system. (309, 2014)
>
> We have not yet had a formal system for dealing with risks. (312, 2014)

There is a commonality in these statements from the interviewees: the three local governments had not yet had formal risk management. The absence of a formal system raises questions because risks always exist as uncertainty in the ability to achieve objectives and, as discussed in Chapter 5, respondents identified the existence of numerous risks. What do the local governments do with their risks because it is almost impossible to achieve objectives without controlling them? A study conducted by Murtonen (2010) regarding formal and informal risk management action in projects may provide part of the answer to this question. Murtonen wrote that informal actions are always needed in complex social environments that lack predetermined action plans and specified response strategies (Murtonen, 2010). Two respondents supported this by stating that they did control risks as a reaction to them. Another supporting statement was provided by a respondent:

> Formally, we have not yet implemented risk management. However, we do control our risks. (305, 2014)

It is curious to know how they implement risk control without a formal system. As the ISO states, controls involve “any process, policy, device, practice, or other actions which modify risk” (ISO, 2009, p. 6). Controls are provided and modified by risk treatment decisions and implementation. Risk treatment is a “process to modify risk” (ISO, 2009, p. 6), that can involve some of the options listed below:

a) Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk.
b) Taking or increasing the risk in order to pursue an opportunity.
c) Removing the risk source.
d) Changing the likelihood.
e) Changing the consequences.
f) Sharing the risk with another party or parties (including contracts and risk financing).
g) Retaining the risk by informed decision (ISO, 2009, p. 6).

The current efforts of Indonesian local government to use treatment and/or control in managing identified risks is described in the subsections below. The discussion presented follows the risk categories presented in the introduction to this chapter and, in more detail, in Chapter 5.

7.2.1 Organizational changes

Repeated organizational change is a risk that has been caused by changes in the Indonesian public sector as triggered by the autonomy laws and regulations governing implementation of the laws. Over a span of eight years, three government regulations were made in regard to local government organization (Numbers 84/2000, 8/2003 and 41/2007). These regulations followed the revision to autonomy laws made in 1999.

Since the enactment of autonomy laws, local government has experienced organizational changes that impact each step of the financial cycle. However, the changes are not yet finished because the process of decentralization in Indonesia is ongoing. Currently, the Indonesian government is preparing a new draft of government regulation regarding regional government organization/regional bureaucracy for alignment with the current law. Organizational change is still a risk that can influence local government in achieving its objectives. This should be a motivating case for local government to make more concerted efforts to manage the risks. Abdullah (2015) wrote that in order to achieve local government objectives in increasing public welfare through the provision of various services and community needs, the organization of local government should be effective (Abdullah, 2015). Organizational changes affect the local government finance cycle from planning and budgeting through to accountability, because each stage of the cycle is a responsibility to be conducted within the organizational structure of local government. Each change influences the ability of local government to achieve its objectives. The process of change due to decentralization has not yet finished, and organizational change is a probability that needs to be managed by local government.

Managing risk includes knowing what is within the scope of control and what is not. Organizational change, in this context, is change triggered or caused by the enactment of new regulations by the central government as a part of the decentralization process. It means that the source of the risk is outside of local government control. However, organizational change should be understood, because these changes often occur, "like a perturbation or a leap in the life cycle of the organization, not as an incremental process" (Burke, 1993, p. 13). Further, Burke (1993) indicated that organizational change seems to occur at a fast pace, and cultural change in an organization can occur more rapidly. Because of ongoing change, organizations continue to become even more complex (Burke, 1993).

Because the source of organizational change is out of the control of local government, options for removing the risk source and changing the likelihood of the risk are not applicable. Because the changes are derived from government regulation, they are mandatory. As such, suitable options for local government risk management include modifying the consequences of the risk. Efforts for reducing the impact of the risk are "moving personnel between agencies" and providing training needed to meet requirements, as the following respondent said:

> The source of this risk is out of our control, for the reason that it comes from central government regulation. We treat this risk by moving personnel from old agencies to new agencies based on their competency. Or we initiate training to fulfil the requirement. However this needs time (needed during the planning and budgeting process) and extra money (needing approval of local parliament). (101, 2014)

This aligns to Choi's proposition that employees are at the center of organizational change and organizations only change through their members. Organizational change should respond to an organization's history and context. Therefore, Choi suggests encouraging open communication, offering training, and implementing task forces for gaining support, participation and trust among employees in periods of change (Choi, 2011).

7.2.2 Fiscal risk

Fiscal risk is significant for local government because it relates to the financial ability of local government to deliver services. Fiscal risk includes the possibility of a default in local government finance, which can be triggered by overestimating revenues, which in turn causes and overestimation in expenditures. As noted in Chapter 5, fiscal risk in Indonesian local government can be caused by factors such as the high fiscal dependency of local government on the central government, the willingness of regents and mayors to prioritize public funds in areas that bolster their public image, ineffectiveness of local governments' budget teams, and political intervention. These factors are mainly internal to local government and may, individually or in combination, trigger fiscal risk. The findings of this study differ slightly from the results of previous studies regarding fiscal risk. Previous studies noted that fiscal risk arises from macroeconomic shock, such as economic growth, commodity prices, interest rates, or exchange rates, and the realization of contingent liabilities (Cebotari, 2009; Makin, 2005). Absence of macroeconomic shock findings in this study is understandable for the reason that local government, up until now, has not used debt for financing its expenditures, and rarely uses foreign currency in its budgeting and spending.

No respondents reported treatment of these risks by eliminating the causes of the risk. One respondent described political intervention and the ineffectiveness of their local government's budget team and the lack of control to eliminate these risks:

> The risk caused by political intervention cannot be controlled. It is also caused by an absence of self-checks by the Budgeting Team. One critical phase of planning and budgeting was monopolized by a member of the team, without control from the others. Until now, there is no effective control of current risks, in view of the fact that it requires commitment from leadership of the regency. However, the influence of political intervention is too strong, even to the top of this local government. (207, 2014)

High fiscal dependency is a common problem faced by local governments in Indonesia, as noted by previous studies of Indonesia's current decentralization (Asian Development Bank, 2012; Lewis, 2005; Seifert & Li, 2015; Sidiquee et al., 2012). A number of respondents in the case studies highlighted that high fiscal dependency is a fundamental problem of Indonesia's decentralization and needs a comprehensive solution. Such a solution must come from both local government and central government initiatives. As noted by one respondent, misestimating the revenue budget due to fund transfers from the central government can trigger serious fiscal risk (210, 2014). This view that treatment of this risk is partly within the purvey of the central government provides an explanation as to why none of the respondents reported local government risk treatments.

A mayor or regent holds a political position and image building is important to defending their position. A respondent noted that the willingness of a regent or mayor to raise his or her image with expenditure allocated to well-known public projects sometimes ignores the financial capacity of local government (101, 2014). This intervention in the budgeting process by the mayor or regent may trigger fiscal risk. It depends on the mindset and commitment of the mayor or regent to following budgeting regulation. Therefore, no respondents reported efforts to eliminate the cause of this risk as it is beyond their control.

However, local government is not passive in relation to the existence of fiscal risk. Efforts are conducted to modify or change the consequences of risks to attempt to prevent a financial default. Prioritizing important activities and programs and revising targets are such efforts, as reported by a respondent:

> Therefore, we delayed or cancelled less important programs/activities, and prioritized the important activities. The other effort was to lower the targets of the activities. For

example, a workshop that targeted involvement of 100 people was retargeted for 50 people due to the budget deficit. It is caused by ambition of the regent and some heads of agencies to set high targets and ignore the real potential of local government. (101, 2014)

The severe impact of fiscal risk has consequences for local government, including cuts to budget expenditures in almost all agencies and activities, as reported by a respondent:

The budget was cut by about 25% causing revision of targeted achievements in all agencies, excepting for the budget for villages and hospitals. For example, this agency (BPKAD) was scheduled to have training to support an accrual basis implementation in 2015 for all agencies. Because of budget cuts, the target was revised. This was followed by the delay of some programs/activities, except for urgent projects/programs/activities, such as multiyear projects that were under contract. This risk was triggered by misestimating budget revenue from the central government's transfer of funds. (201, 2014)

7.2.3 Delayed or low budget disbursement

The occurrence of risks is a common problem in post-decentralization Indonesian local government. Indeed, this is a central theme resulting from the data analysis. The risks are caused by at least four factors, as were mentioned earlier: a lack of personnel in terms of quality and quantity, frequent personnel turnover, absence of standard operating procedures, weaknesses in procurement processes, and a fear of legal risk. One, or a combination, of these risks will cause delays for activities or projects and, furthermore, have an impact in budget absorption. Consequently, it will impact the performance of the subsequent year, as related by a respondent:

It was caused by and inability to absorb the budget in previous years. The budget finally became SILPA [budget surplus] and then it became a source of local government budget funding, similar to revenue, even though real income tended to decline. (208, 2014)

There are other factors that cause delayed or low budget disbursement. Indonesia is an archipelago with its regions spread over thousands of islands. The government has to deliver services to all areas, even though they are remote and isolated. This geographical condition influences the process of local government finance. Furthermore, decentralization means a transfer of responsibility in service delivery from central government to local government. According to the Asian Development Bank's (ADB) report, Indonesian decentralization moved the responsibility for delivering most basic public services, and reassigned two-thirds of civil servants and more than 16,000 facilities to the local government (Asian Development Bank, 2012).This decentralization has involved many issues and a huge amount of money that local governments sometimes do not have capacity to deal with. These factors align with a respondent's statement:

> Delays in budget disbursement, sometimes until end of the year, were caused by limitations of human resources, a very large number of projects and geographical factors. Payment for a project requires completion of various documents, including a physical examination of project outcomes by a team. The team must go to the location, which takes time due to our geography and limitations in transportation infrastructure and options. (211, 2014)

The factors causing the risks, excluding the geographical factor, are interrelated and all exist in the one system of local government financial management. This interrelatedness and coexistence lends support to the argument that they should be treated holistically and not individually. This would require comprehensive, systematic action, including an organizational overview, in order to develop a risk management system. As proposed by Crawford and Stein (2004), a corporate overview is needed for judging an organization's overall exposure to significant risks and applying rational analysis to the application of resources (Crawford & Stein, 2004).

Unfortunately, no respondent in the case studies that reported the existence of a formal risk management system. However, one respondent identified the need for a systematic approach to addressing risk:

> We need a strong system that can provide discipline to the process, a system that has automatic controls encouraging ourselves to obey regulation. For example, relating to delays in budget disbursement, we have a cash budget that has a schedule of budget disbursements into the four quarters. However, we rarely obey the schedule. Sometimes the first or second quarter activities are paid in the fourth quarter. We should have a system that automatically locks if the schedule has been exceeded. (303, 2014)

7.2.4 Legal risk

Legal risk is a frightening for local government officers, as shown in Chapter 5. It is closely related to fraud risk for the reason that, from a local government officer's perspective, legal risk events are caused by fraud committed in the local government financial process. These events can have frightening consequences, including imprisonment. During the period from 2004 to 2016, there were 107 cases of corruption involving local government personnel, as reported by Corruption Eradication Commission (KPK, 2016).

Earlier it was discussed that legal risk is caused by factors such as the corruption eradication movement, weaknesses in human resources, the massive scale of local government activities, funding, and fraud. There are efforts to reduce the likelihood of the risk by modifying the cause of the risk, such as improving the understanding of personnel of their relationship with legal aspects. One respondent reports:

> We gave motivation and encouragement for them to carry out their jobs based on regulation. We also provided training to improve their knowledge and understanding. We also consulted with external parties such as BPKP and BPK. We also have cooperation [MOU] with the prosecutor office and KPK. (307, 2014)

This effort is only one treatment for one cause of the risk. There are other causes and the risk also is related to other risks, such as asset management related risks, operational risks, human resource related risks, and political and other intervention risks. Again, this points to the need for a comprehensive treatment or systematic approach to the management of risk within Indonesian financial systems at the local government level. Respondents report scarcity of this approach in local government financial management. However, one respondent was aware of the need for a more systematic approach by developing SOPs as a representation of the system:

> Because of legal risk in managing finance, personnel at all levels prefer to be careful in carrying out programs/activities. There are some cases of them not executing the program because they were afraid of legal risk. We are thinking that we need SOPs . . . with SOPs we will have clear guidance. Responsibility, accountability, what will we do, who will do it, how long will we do it, and how will we do it, all will be clearly regulated in our SOPs. Before I thought that SOPs were not urgent for us and it has

not yet been a priority for our agency. However, discussion with some prosecutors indicated that we should have SOPs. By this, if there is a mistake or a legal case, we can clearly identify and trace who is the person in charge, who will be responsible and in what level. All of them will be clear if we have SOPs. (306, 2014)

7.2.5 Fraud risk

Chapter 5 describes fraud risk as mainly caused by high political costs and by mindsets. According to Law Number 8/2012 regarding general elections, determination of elected candidates for parliament (including local parliament) is based on the number of seats acquired by political parties in an electoral district and by the candidate with the most votes (Republic of Indonesia, 2012). Therefore, each candidate makes every effort, including illegal actions such as buying votes with money, goods, and food (politik uang or money politics), in order to get as many votes as possible. Regulations forbid buying votes and carry the threat of imprisonment and/or fines. However, in practice, it still happens. Rhoads (2012) called it a "pervasive culture" which "continue[s] to reserve political space only for the wealthy and traditional elites" (Rhoads, 2012, p. 45). Therefore, it is understandable that a respondent would say that there is a need for changes to politics and political regulation:

> We need political and regulation changes. Though, this is not easy . . . it is caused by high costs required to get elected in our political system. We have an open, proportional system in public elections. Whoever, receives the most voters will be a member of local parliament. Therefore, candidates use all sorts of means to get elected, including purchasing votes. Moreover, our people have a pragmatic culture. The candidate that gives more money will be elected. It is real, not just speculation. The system should be changed, for example, by using the serial number of candidates. The current system motivates candidates to spend more money to buy votes, sometimes going in to debt. For example, my friend spent about IDR 600 million to be elected. The impact is, if they are elected, they will try to recoup their money by, for example, manipulating activities or projects. It is a fact that our bureaucracy is always influenced by money. (209, 2014)

This quote supports the argument that legal risk, fraud risk, and political intervention are interrelated, and have a significant impact on local government bureaucracy and financial management. The risks are triggered not only by personnel matters, such as mindset, but also by the political system in Indonesia. The cause of the risks is not only internal to local government, but also from external sources beyond the control of local government. Therefore, treatment of the risks should be focused not only on improving personnel of local government and developing effective and efficient systems, but also on changes in external systems, such as the political system in Indonesia, as suggested by the respondent.

7.2.6 Risks related to asset management

Asset management is a common problem in local governments. In each local government that was involved in this study, there were respondents who raised issues related to asset management. This finding is supported by the findings of BPK's audit, which stated that one of local governments' weaknesses in achieving the highest audit opinion is asset management. BPK also reported that 230 entities had problems relating to their assets (BPK-RI, 2015).

Asset management related risks are caused by personnel matters and the lack of adequate systems. From the personnel perspective, there is an old mindset that assets and their management are not important. The mindset triggers reluctance to learn and understand asset management and this affects the capabilities of the personnel. Relating to system matters, local government accounting is becoming a complex system. There are at least seven financial reports to be provided by local government, as mandated by Government Regulation Number 71/2010, regarding government accounting standards. The reports include (1) statement of budget realization; (2) statement of budget balance; (2) balance sheet; (3) statement of operations; (4) statement of cash flow; (5) statement of equity; (6) notes for the financial statement (Republic of Indonesia, 2010).

One output of asset management is data for completing the balance sheet and notes for the financial statement. Therefore, weaknesses in asset management affect financial reporting.

Treatment of asset management related risk should target the elimination of the causes: old mindsets and lack of an adequate management system. Treating the risk should develop an awareness that assets and their management are important, not only for internal uses, but also for external reporting. Asset management affects the results of an audit. Upper management should show commitment and leadership by demonstrating the importance of asset management. This could also be carried out by the enactment of formal regulation.

Considering the complexity of local government accounting and the scope of assets, asset management should be supported by an adequate system. A computerized system, integrated with other local government systems, is preferable. The efforts of a local government in regard to managing asset related risks, were related by a respondent:

> For dealing with the risk, we use information technology. We use a computerized asset management system (called SIMDA Barang) provided by BPKP. Further, for changing the old mindset, asset management is now based on a Provincial Regulation, demonstrating its importance. (201, 2014)

7.2.7 Failure of the planning system

The impacts of failures in the planning mechanism go beyond planning itself. Planning failures influence the execution of the plan and the effectiveness of service delivery, as described in Chapter 5. The planning process in Indonesian government, including local government, is comprehensively regulated in regulations such as Law Number 25/2004, Government Regulation Number 8/2008, and Ministry of Internal Affairs Regulation Number 54/2010. Development planning for local government is conducted using four approaches: technocratic, participative, political, and top-down/bottom-up (Minister of Internal Affair, 2010).

Involving society in the planning process aligns with these approaches. The technocratic approach is a process in local government agencies. Capturing aspirations occurs in participative, political and top-down/bottom-up approaches (Minister of Internal Affair, 2010). The participative approach takes the form of a meeting for development planning (*musyawarah perencanaan pembangunan/musrenbang*). The political approach is conducted by members of local parliament and involves the planning process and the adoption of a vision and mission from the regent or mayor. The top-down/bottom-up approach is intended to harmonize and synchronize people's aspirations and the results of the technocratic approach (Minister of Internal Affair, 2010).

Given the extent of planning guidance, approaches, and controls, gaps or mismatches of planning should not happen. Gaps are caused by differences between people's wishes and development priorities in the face of limited local government resources. This is not entirely within local government's control. Therefore, in dealing with this risk, local government carries out efforts to minimize the gap, as exemplified by a respondent:

> We manage this situation in two ways. Firstly, we allocate budget ceiling for each subdistrict (for reducing the amount and value of proposed activities/projects in a subdistrict). For example, there was a subdistrict that proposed approximately IDR 300 billion. This was impossible, because the total budget of direct expenditure for this local government was about IDR 290 billion to be allocated to 13 subdistricts. Secondly, we provide the subdistrict with the annual planning of particular agencies. Then the proposal mainly just determines the location of the activities/projects. The two ways for controlling risk of the planning system has been relatively effective. (101, 2014)

Another respondent noted a checklist as control tool for recording completion of planning processes and documents:

> "One kind of control relating to risk in the process of planning is a checklist for planning completion. The checklist is a list of processes or documents that must be completed during the planning process." (208, 2014)

The setting of policy cannot be separated from the planning process in local government. Local government development policy involves long-term plans, midterm plans and annual plans. Each plan contains policies and priorities for local government development (Minister of Internal Affair, 2010). Therefore, the process of policy setting aligns with the discussions above. It uses four approaches: technocratic, participative, political and top-down/bottom-up (Minister of Internal Affair, 2010). Again, it needs a systematic approach in order to appropriately treat policy risk.

There was a limited amount of information provided by respondents in relation to this risk. One respondent proposed that each policy should have a clear basis and philosophy:

> We have tried to avoid risks by developing policies from a clear basis and philosophy and, further, we developed policies that were not a burden on our people, were welfare oriented and maintained order and public safety. (107, 2014)

7.2.8 Operational risks

Operational risk covers a wide area of local government financial management as it involves all matters relating to inadequate or failed internal processes, people, and systems and from external events (Basel Committee on Banking Supervision, 2001; Jarrow, 2008; Power, 2004). In Chapter 5, the respondents described examples of operational risks involving underprepared activities, data entry errors, incapable contractors, computer data loss, and unauthorized access of computer systems. The respondents identified controls that were carried out relating to these risks:

> For dealing with the contractor related-risk, we tightened the bidding process. We hope that through this process, the winner is a capable contractor. In the contract execution, we supervise the job, following the requirements of the contract and its supplements. (211, 2014)
>
> There are controls on the server side. We provided a generator that runs automatically whenever there is an electrical failure and this is backed up with an uninterruptable power supply (UPS). (206, 2014)

A respondent reported the absence of controls on a kind of operational risk:

> Until now, relating to misuse of passwords, we still do not yet have a control. (205, 2014)

Operational risks caused by internal and external factors can affect local government service delivery. Further, they may ultimately cause reputational risks. From Power's proposition regarding reputational risk (Power, 2004), this means that operational risks influence every aspect of the local government financial system. Again, this lends credence to the idea that a systematic approach is needed for treating risks. It is not enough to control each operational risk individually and, as noted, no respondent in the case study sites reported the existence of a formal risk management system.

7.2.9 Other risks

Some other risks that were mentioned in Chapter 5 include fire risk, theft risk, risks of natural disasters and environmental damage. Treatment for fire risk exists even though there is no explicit requirement as part of a formal and integrated risk management system:

> We control it by providing fire extinguishers that are periodically checked by fire

fighter staff. (101, 2014)

Theft risk effects asset losses and further influences local government finances. A respondent reported an effort to treat the risk:

> For controlling this risk, we assigned two security staff during the night from the end of the work day and until the beginning of the next work day. (101, 2014)

As described in Chapter 5, Indonesia is at risk of natural disasters due to its location. Disaster management in Indonesia is comprehensively regulated in Law Number 24/2007 regarding disaster relief. The regulation arranges aspects of disaster relief such as responsibility and authority, institutional roles, disaster relief operation (pre-disaster, emergency response and post-disaster), funding and its management, and supervision (Republic of Indonesia, 2007b). Furthermore, the funding of disaster management is the responsibility of the central government. Regional governments (provincial and local governments) have to be allocated from the central budget. Funding can also be initiated by nongovernment organizations (NGO) (Republic of Indonesia, 2008b).

7.2.10 Human resource risk

A significant theme emerging in Chapter 5 was human resource related risks, which include lack of personnel and inadequate personnel competency. These have significant impacts on local government financial systems and practices. Furthermore, as seen in earlier chapters, human resource related risks also trigger most of the other risks previously identified, such as delayed or low budget disbursement, legal risk, fraud risk, asset management related risks and operational risks.

Earlier discussion identified that the risks were caused by frequent personnel turn over, mindset matters, and weaknesses of recruitment, including processes of placement and promotion. One issue reported by respondents is work culture as in the examples below:

> The risk relating to human resources is caused by two factors, mindset and the recruitment mechanism. The current situation is different from before. We must quickly adopt new regulations. We have to be proactive, we do not need to wait for instruction. The current situation is, if we are without an assignment, we just relax, chat with friends, and do not do self-improvement. When we get an assignment, we

rush to look for the needed material/regulation. Of course, this cannot give positive results. In my opinion, mindset is the main problem. (212, 2014)

The risk was caused by our work culture and mindset. As a government officer, we are paid for working and producing something. We are paid for coming to work in the morning until afternoon and doing our job. But there was mindset that this was not enough and asked for more. (214, 2014)

The effect of this "mindset" is compounded by a belief that staffs are experts with no further need for new practices or knowledge:

The risks are triggered by personnel's reluctance to adopt new knowledge and changes, for the reason that they think that they are already experts in their current job. (201, 2014)

Discussion of human resource risks cannot ignore the recruitment process, as it can be considered a cause of human resource related risk. The recruitment mechanism had not supplied the competent personnel needed by local government agencies, as reported by two respondents:

It was also caused by recruitment in the past. We recruited personnel with competencies that were not suitable to our needs. (214, 2014)

For staff recruitment, we just wait for an allocation from our human resource management agency. For example, we proposed that we need accountants, but until know this has not been fulfilled. (212, 2014)

An impact of this subpar recruitment is the personnel not being able to optimally perform their job, and this triggers another risk. An example was provided by a respondent:

Staffs' understanding of their own job was not optimal, so sometimes they did not carry out their job in alignment with current regulation. This can be an obstacle and extends the time required to complete jobs. For example, expenditure evidence should be processed immediately, but because of limited understanding, the process was delayed. It caused low budget absorption. At this time, budget absorption should be 30–40%, but it is currently only about 10%. (201, 2014)

Another factor that causes risk is political intervention, especially from regents or mayors, because they have authority to appoint and dismiss the heads of agencies and their staff. Appointment to positions is sometimes not determined by the skills and ability of the personnel, as reported by a respondent:

> The risk is caused by policy and ambiguous regulation. Placement of the personnel is at the authority of the regent, and the placement is sometimes carried out subjectively. There are placements that are not based required knowledge/skill. It is about commitment of upper management. (304, 2014)

Respondents identified efforts to deal with human resource related risks. They are grouped into four categories as described in the following subsections.

7.2.10.1 Improvement program

Inadequate capability of local government personnel is a common risk that influences all aspects of local government financial management, as each step in the financial cycle needs personnel with certain knowledge and skills. The weakness in personnel quality also triggers other risks in local government finance. Local government is aware of this matter and provides personnel improvement programs for treating the risk by modifying its cause. Some respondents said that training, both internal and external, was the first choice for improving the capacity of the personnel:

> To minimize the impact of quality, we conduct internal training for staff. We have a monthly agenda to transfer knowledge to staff. If there is a budget for training, we send the staff for external training. (211, 2014)

> For improving personnel's competency, we provide various training opportunities such as training in taxation, preparing financial statements and asset management. For this purpose, we have cooperation with a university. (201, 2014)

> Relating to human resource risks, we make continuous effort for increasing their capacity by providing training and comparative studies with other local governments. (205, 2014)

> We provided training for improving our personnel. Some of the training we did it in Jakarta, however it was not effective. We also did it locally. We provided our personnel with references, books, and regulations. (210, 2014)

However, there is a weakness in the improvement program. Local government does not have a standard system for improving personnel capacity with training. The knowledge or skills obtained from training is only for the person involved in the training. There is no obligation to share the new knowledge with others, as reported by a respondent:

> We have not yet had a systematic mechanism for improving capability of our human

> resources. For example, we do not have an obligation for staff that participate in training to share their knowledge with others. Sometimes staff are assigned to training that is not aligned with their daily job, therefore, the training is useless. The impact is that the new knowledge/skill is only owned by certain people, we do not know what they do in their job. (203, 2014)

All of the above highlights the systemic nature of the issues and factors that impede the management of risks within the Indonesian financial system. Further, lack of competency and current mindsets affect the creativity of personnel. As reported previously, personnel wait for instruction in carrying out their job. Therefore, intensive coordination is needed in order to guide them in support of local government achieving its objectives. Coordination has been conducted both in formal and informal approaches as reported by respondents:

> We took proactive action, and simultaneous coordination for assisting staff, however it is restricted by my authority. It is more an informal approach than a formal one in view of the fact that, somehow, a formal approach, such as using a formal letter, will not effectively solve this problem. (101, 2014)

> Because of personnel quality and quantity limitations, we carried out weekly meetings for coordinating with other sections. We hoped it would limit our weaknesses. (211, 2014)

7.2.10.2 Improvement in recruitment process

In the past, local government officers were recruited without having needed expertise, as reported by respondents. Currently, there is improvement in government officer management as regulated by Law Number 5/2014 regarding state civil apparatus. Recruitment has to be carried out based on needs identified by job and workload analysis. Each government agency is obligated to arrange for the needs of the employee, including identification number and kinds of jobs or positions. Each government agency also has to plan employee recruitment (Republic of Indonesia, 2014a).

The current study was conducted from early to mid-2014, early in the period of the implementation of this regulation. Therefore, the clauses of the regulation were still being implemented in local government during the case study analysis. With regard to employee recruitment, one respondent said:

> Employee recruitment should be based on our needs. We asked for additional staff

> with expertise in accounting, for example. We need four or five accountants for improving our financial reporting systems. However, we can only propose our need, the decision is the authority of another agency. We have not yet had a grand design for employee recruitment. (204, 2014)

7.2.10.3 Changing mindset

As noted above, "mindset" is one cause of local government officers' behavior, such as "lack of discipline", not being creative, and apathy about their job. A respondent gave an example:

> We tried to change the mindset, that understanding their own jobs and regulations were very important. Before, they just came to the workplace, stayed, did something if asked, and did not understand the substance of their jobs. (210, 2014)

Changing the mindset is not an easy job. Considering the Indonesian culture, both formal and informal approaches should be applied. Reward and punishment approaches should be implemented carefully to gain optimal results. Some respondents proposed these approaches to changing the mindset of local government employees:

> We found that bad habits or behaviours of the employee will be a problem, such as lack of discipline. It can cause tardiness in completing their jobs. For making changes, we need formal and informal approaches. We developed a formal system for minimising the impact, such as finger print sensors to supervise attendance. At the same time, we use an informal approach. We should build togetherness. We visit them if they are sick. We develop close relations by touching his/her heart. We need informal approaches to supporting the formal approaches to changing mindset/behaviour. (213, 2014)

> Changing the work culture and mindset needs not only a formal approach, but also an informal approach. We should develop personal relationships and communication. It will be more effective than formal approaches. Formal approaches, such as a punishment, sometimes can cause reverse effects and make it worse. (214, 2014)

> The risk is caused by the mindset of personnel that do not want to improve themselves to fulfil job requirements. We tried to give a reward, a special allowance for our staff, however, it was not effective. The problems still exist. Further, we are trying to use punishment by delaying payment of their allowance. Our experience was that this was more effective. (303, 2014)

According to Muljanto (2015), government officers experience difficulty in changing mindset. The resistance of changing is caused by mental block. Pessimism is caused by negative self-beliefs based on negative thinking. By changing the pattern of negative thinking into positive, a government officer who previously had a pessimistic attitude will develop an optimistic attitude (Muljanto, 2015). This seems to suggest the benefit of informal approaches for changing mindset.

7.2.10.4 Provide clear guidance

Frequent employee turnover is a problem for the reason that there is no standard mechanism for handing over jobs from predecessor to successor, as the respondent below notes. A new person has to start from the beginning every time he or she takes on a new job or position. This is inefficient and takes time. Standard operating procedures for a job can provide the boost required by a new employee in learning a new job. This risk treatment mechanism is reported by a respondent:

> There is no obligation for a predecessor to formally hand over his/her job to his/her successor. There is no regulation or SOPs that obligates this task. Therefore, the successor will take over the job without enough information and have to learn it from the beginning. Providing SOPs for each job will support reduction in the likelihood of the risks. (308, 2014)

7.2.11 Political and other intervention

Political and other intervention result from Indonesia's current high cost political system. The existence of *politik uang* (purchasing votes), as noted by Rhoads (2012), causes political corruption, which as affects the performance of post-decentralization local government (Eckardt, 2007). Further, as discussed in earlier chapters, based on current regulations, local government, represented by the mayor or regent and local parliament, has powerful authority in managing its territory (Republic of Indonesia, 2004b). Therefore, directly or indirectly, he or she can influence local government bureaucracy by intervening in the local government financial process.

This intervention is also an obstacle for the bureaucracy in conducting jobs professionally. Local government employees are influenced, directly or indirectly, by politics, and this affects their objectivity in delivering services. The phenomena was reported by a respondent:

> We need political and regulation changes. Though, this is not easy . . . it is caused by

> high costs required to get elected in our political system. We have an open, proportional system in public elections. Whoever, receives the most voters will be a member of local parliament. Therefore, candidates use all sorts of means to get elected, including purchasing votes. Moreover, our people have a pragmatic culture. The candidate that gives more money will be elected. It is real, not just speculation. The system should be changed, for example, by using the serial number of candidates. The current system motivates candidates to spend more money to buy votes, sometimes going in to debt. For example, my friend spent about IDR 600 million to be elected. The impact is, if they are elected, they will try to recoup their money by, for example, manipulating activities or projects. It is a fact that our bureaucracy is always influenced by money. (209, 2014)

The previous discussion regarding risks and their controls in local government ultimately yields the conclusion that local government needs a comprehensive system for managing risks. In addition, two further identified risks, lack of systems and reputational risk, support the proposition. Providing a solid system is necessary to efforts to manage risks. Further, following Power's proposition, reputational risk can be triggered by all aspects of the local government financial system. Therefore, for managing such risks, local government needs to undertake efforts that cover all risks, or in the words, local government should manage the risks of everything.

7.3 Current Local Government Approaches to Managing Risk

As concluded in the previous section, the data from this study lends support to the proposition that local government would benefit from a system for managing its risks, with the capacity to influence all processes in achieving objectives. The current system relating to efforts in managing risk is a system of governmental internal control.

As discussed in Chapter 6, according to the survey findings, 50% of respondents stated that their local governments and agencies had implemented a formal risk management system. Furthermore, and as discussed in Chapter 6, there is only one regulation that obligates local councils to implement a system that relates to risk management. This is Government Regulation Number 60/2008 regarding a system of government internal control (*Sistem Pengendalian Intern Pemerintah* or SPIP). Even though SPIP is not a formal risk management system, its substance is an effort toward managing risks in a governmental environment, including local government. Therefore, discussion relating to existing risk management refers to the current implementation of SPIP in local government.

Relating to the implementation of SPIP, one respondent said:

> Local governments have government internal control system (SPIP) based on Government Regulation Number 60/2008. They all have regent/mayor regulations regarding the implementation of SPIP and the formation of a task force for its implementation. This creation of this task force was expected to trigger SPIP implementation. However, it has not worked. There has been no further action. It is caused by a lack of support from the leadership and a lack of commitment from the taskforce. (401, 2014)

Local government is mandated by regulation to implement SPIP. SPIP can be a formal system that can be used in managing risks that can be treated by internal controls. However, as related by the previous respondent, it does not work. Indeed, other respondents said that they did not recognize a formal system for managing risks:

> Until now, there is no formal risk management system in our agency. (214, 2014)
>
> Formally we have not yet implemented risk management." (305, 2014)
>
> Until now, we have not yet had a formal and standard system of risk management. (306, 2014)
>
> In our division (accounting and reporting) we have not yet implemented formal risk management. There are no controls for the management of it. (308, 2014)
>
> We have not yet had a formal risk management system. (309, 2014)
>
> We have not yet had a formal system for dealing with risks. (312, 2014)

However, despite these comments, some risk control must be present in local government because risks are present yet local government still operates normally. Risk control must be carried out, even in an informal manner, as one respondent said:

> Formally we have not yet implemented risk management. However, in fact, we do control our risks. (305, 2014)

Further, based on this case study, the current practice of risk management in local government can be grouped into two categories: efforts reacting to current problems and efforts implementing formal risk control (SPIP).

7.3.1 Reaction to problems

From the previous section, local governments conduct risk control in response to each identified risk. However, this risk control is not carried out in a formal risk management framework. It is, rather, a reaction to problems that occur in managing local government finance. It is carried out on a case-by-case basis of individual responses to risk events. It is not a systematic effort for anticipating the possible occurrence of risks. The existence of controls and their characteristics are reported by respondents:

> Risk controls are still in reaction to current problems, such as providing budget ceiling and agencies' annual plan for sub-districts, using information technology to supplement a lack of personnel, providing fire extinguishers, providing night guards. Until now, the risk controls have been carried out informally. (101, 2014)
>
> Risk controls are still reactions to current problems, such as carrying out good recruitment of required staff and providing training for improving staff competency. (102, 2014)
>
> The existing risk control is more responsive actions to risk events than anticipative control. It has not yet been carried out in a system, it is conducted on a case by case. (108, 2014)
>
> The controlling system, until now, is a reactive action to current problems. (109, 2014)
>
> The controls were in reaction to the existing risk. (111, 2014)

Therefore, the efforts are not a comprehensive and integrated system, but rather sporadic control carried out by instinct, as described by one respondent:

> However, the control was implemented sporadically, informally and carried out by instinct. (103, 2014)

According to another respondent, it is also a partial activity, not a comprehensive system:

> From the risk assessment we identified the need for the improvement of current steps. Our staff still have limitations in understanding the objectives of the activities, the business processes and the risks that may appear. The risk assessment is still a partial activity for some activities/programmes/projects. It is not a comprehensive system for all agencies. (204, 2014)

The discussion in the previous section also demonstrates controls as reactions to existing risk events or problems in local government finance. Because the controls are a reaction to current problems, respondents did not report the effectiveness and efficiency of the efforts. However, some respondents identified advantages: they were simple and required only a small budget for implementation:

> The existing controls are simple. (101, 2014)
>
> Our risk control is relatively simple, because it is a reaction to existing risk, and it needs only a small budget. (111, 2014)

Some respondents also described weaknesses of the current approach in managing risk, including risks related to inadequate documentation:

> Risk and risk analysis have not yet been documented in writing. (107, 2014)

From the respondents' comments, a picture emerges of a "just do it and leave it approach". One of the inherent problems of reactive and piecemeal approaches is that they limit the ability of local government to replicate approaches in other activities or places, because poor documentation means there is no evidence that a risk control has been implemented. Consistency of controls cannot be guaranteed. This mitigates against the principle in ISO 31000 that "a systematic, timely and structured approach to risk management contributes to efficiency and to consistent, comparable and reliable results" (ISO, 2009), p.7). This situation was reported by one respondent:

> Our weakness was our reluctance to document our control process. Therefore, there was no evidence of the risk control. For example, we never made documentation of internal meeting minutes or weekly meetings as risk control evidence. (111, 2014).

Absence of documentation may lead to other risks, such as legal risks. Sometimes risk control is part of someone's responsibility or job. If there is no evidence of risk control's existence when a fraud case is indicated, the absence of proof that work has been done, such as the checking of the completeness of payment documents, will raise a legal risk according to current regulations, for example Clause 61 of Government Regulation Number 58/2005, which states that each payment must be supported by complete and valid evidence (Republic of Indonesia, 2005). Therefore, lack of documentation, in this case, is failure to obey the law and can be interpreted as explicitly breaking the law. Further, according to Clause 2 of Law Number 31/2009 regarding corruption eradication, one aspect of committing corruption is breaking the law (Republic of Indonesia, 1999). Therefore, not performing a task by regulation can be classified as breaking the law and, therefore, can result in a charge of corruption. It is no wonder that local government staff get frightened. A respondent reported the importance of documentation:

> We have not documented the process of controlling risk. For example, in physical projects, we have some supervisors that inspect the projects. Their job is supervising the process of a physical project. At the moment they do not have guidance about what they should do. Further, they do not record or document what they do. There is no evidence that their job was done. (305, 2014)

Because controls are carried out informally, there is no standard for treating risks. Two people may control the same risk in very different ways. There is no consistency in adopting the controls. Implementing the controls highly depends on people, in some cases the leader, not a system. This situation was reported by some respondents:

> Until now, we have not yet had a formal and standard system of risk management. (306, 2014)
>
> The risk controls are still not documented, are non-standard and depend on our leader. (214, 2014)

Informal control is also characterized by an absence of guidance that determines how the control activities should be conducted, as related by one respondent:

> The weakness of the controls is that the controls are an informal system. When there is employee turnover, both at the echelon and levels, the simple and effective controls will not be carried out as before. There is no formal rule or regulation for the control. The controls are not formally established. In other words, there is no SOP for the controls. (101, 2014)

This discussion has demonstrated an approach to managing risk in local government. Reactive action is conducted to solve a problem or risk event. The approach is simple and does not need a large budget. However, it involves weaknesses that affect the viability of the approach. The reactive approach is sporadic, informal and is not carried out systematically. The approach is also not properly documented, not standardized and lacks guidance, therefore, it is not easily replicated and it may trigger other problems such as legal risk.

7.3.2 System of government internal control (SPIP)

As discussed earlier, SPIP is the only system within regulation for formally controlling risks in local government. It is enacted by a government regulation (Number 60/2008) and was followed by the enactment of regulation regarding regents and mayors within all local governments in Indonesia. Obviously. SPIP is a formal mandate, and some respondents agree with it:

> SPIP has a legal mandate as regulation from central government and local government. (206, 2014)
>
> We have enacted SPIP as Regent Regulation. (206, 2014)
>
> Local governments have a government internal control system (SPIP) based on Government Regulation Number 60/2008. They all have regent/mayor regulations regarding the implementation of SPIP. (401, 2014)

Some respondents reported that implementation of SPIP was still in its beginning steps. This supports the findings presented in Chapter 6 that only 50% of local government had implemented a formal risk management system. This low rate could be attributed to respondents not knowing about the SPIP, because information about, and implementation of, SPIP might not have reached them or their agencies. According to the respondents, there are two stages to the current SPIP implementation: enactment of regulation regarding SPIP implementation and a more advanced briefing regarding SPIP to workers employed at echelon levels in local government. These stages were described by some respondents:

> We started implementing risk control by adopting the system of governmental internal control (SPIP). We had a Regent Regulation regarding it. However, after one year, we have not yet seen evidence of its implementation at the agency level. I think it is about commitment. It is lack of commitment from the heads of agencies. (103, 2014)
>
> We have just started implementation of the system of government internal control (SPIP). However, it is in the very early steps. We have just given a briefing to heads of agencies and echelon II and echelon III personnel. Until now, the SPIP has not yet been implemented. (104, 2014)
>
> We have begun implementation of SPIP, although it is still at a simple level. We wait for guidance or regent regulation. (105, 2014)
>
> We still lack guidance for implementing the system in each local government agency. (206, 2014)

In these quotes, the respondents identified the causes of the slow implementation of SPIP as lack of commitment in top management and lack of guidance in implementing SPIP. Furthermore, aligned with previous discussions, slow implementation was also triggered by the weakness of the mandate. The mandate was not strong enough to enforce local government implementation of SPIP. This was reported by two respondents:

> Implementation of the current SPIP was just like a request. Although the regulation mentions that it is an obligation for every government institution to implement the SPIP, there are no clauses regarding sanctions for not implementing it, the requirement is not strong enough. The key factor of SPIP implementation is the leader. Therefore, the implementation was without clear progress and without proper planning. (103, 2014)

> The mandate for implementing SPIP is not strong enough. Implementation of SPIP will not succeed if it only takes the form of regulation enactment without any power for enforcing its implementation, making it an obligation. An example of a stronger mandate might be an agency proposing a budget requiring evidence of SPIP implementation being attached. (105, 2014)

It would be interesting to understand SPIP practice in the local government environment. However, no respondents reported a full implementation of SPIP during the study. As mentioned earlier, some respondents relayed information regarding the beginning steps of the implementation and, as a result, it cannot be defined as a full system implementation.

A current effort in implementing SPIP in local government is control self-assessment. CSA is process of identifying the risks of a project or activity, identifying existing controls and their effectiveness, and developing an action plan for treating residual risks. CSA takes the form of a workshop that is guided by an external consultant. Considering the process, obviously CSA is a kind of risk assessment that is obligated by the regulation for each government institution. Descriptions of CSA were reported by two respondents:

> We are carrying out control self-assessment (CSA) for dealing with risks. CSA is held early in each year, and takes the form of a workshop. In the workshop, people in charge of projects/activities are guided in identifying risks that may affect their job, existing controls and their effectiveness, and an action plan. In my opinion, the CSA is effective because it can provide us with information regarding positive and negative

> aspects of the activities. Each activity contains risks, significant or not, and they are identified with the CSA. (202, 2014)

> CSA is control self-assessment. We do the CSA accompanied by staff from BPKP as a consultant. We discuss our activities, the risks, the dangers and the needed controls. In our agency, CSA was done once, and it should be evaluated for a follow-up. However, CSA make us feel more secure. (203, 2014)

CSA provides advantages to local government officers. Because it is a formal activity, it is documented and can be used as evidence of controlling risk. CSA also provides support for local government officers in identifying the risks of an activity or project and determining action for dealing with them. This helps them make the activity or project safer. Some respondents reported similar advantages of CSA:

> The process and output of CSA are well documented. CSA can help us by assuring that our activities are safe, and that identified risks are well controlled. CSA is carried out by the owner of the activities. They know their job precisely, therefore risk information and how to manage it will be well identified, Furthermore, it will give them self-confidence in carrying out their jobs. (202, 2014)

> The CSA process was documented. (203, 2014)

> We did a risk assessment for some activities in our agency. It is a new step for us, for the reason that we did it formally and it is documented. Our current risk assessment identifies risks, allowing us to anticipate the risk. (204, 2014)

However, CSA also contains some weaknesses if considered from the perspective of an integrated system. CSA is an activity separated from the daily activities of local government. As mentioned earlier, it takes place as a workshop guided by an external consultant. One respondent identified some of the weaknesses:

> There is no system for identifying risks in each activity. So far, we only did CSA once. CSA is actually a system that is not integrated with our daily system. It is still a separate activity. (203, 2014)

Further, because CSA is not an integrated system, its effectiveness depends on the ability of the person in understanding business processes, the risks and risk analysis. Considering limitations in the competency of local government personnel, CSA still needs support from an external party, as mentioned by two respondents:

> The effectiveness of CSA depends on the person who carries it out. It will depend on the capacity of our personnel in understanding our business process, the risks, risk

> controls and completeness of the analysis. However, CSA is not a formal system of risk management. It is a program/workshop as an early warning/detection activity before we carry out our activities/projects. We are not sure about the follow up of CSA. Until now we are still evaluating the effectiveness of the CSA, because it was just started in February 2014 (4 months ago). (202, 2014)

> We have not carried out CSA by ourselves. We still need the assistance from an external party (BPKP staff as consultant). (203, 2014)

This finding is interesting. About six years after the enactment of regulation regarding SPIP in 2008, the implementation of SPIP was still in the very early stages. CSA, as an effort for implementing SPIP, had just been introduced (at the time of the case study) and cannot be viewed as a complete SPIP implementation. This discussion shows that this was caused by the lack of a strong mandate, a lack of guidance and a lack of commitment.

7.4 Conclusion

According to the current study, local government has not yet implemented a formal risk management system that is an integrated and comprehensive in scope. Rather, the data paints a picture of efforts in controlling risks as reactions to current problems or risk events in managing finance. Further, local government's reaction takes the form of developing controls on identified risks that may affect achievement of objectives. The controls obviously have positive effects on managing the risks, because local government financial management is still running normally.

However, there are inherent weaknesses in these efforts. The efforts are sporadic and do not comprehensively assess and treat the risks. In addition, the risk controls face a lack of documentation and guidance and, therefore, they are difficult to implement and consistently replicate. The continuity of the effort is also called into doubt, given the absence of a formal mandate and guidance.

In conclusion, the complexity and the significant consequences of identified risks and weaknesses of the current risk controls suggest a need for a solid system for managing risks. However, local governments experience an absence of such a system. SPIP, a currently available system, still faced obstacles in its implementation. Lack of an adequate mandate, lack of guidance and lack of commitment have been common issues in implementing SPIP. Therefore, it can be understood that SPIP implementation is still in its very beginning stages, and local government officers still do not understand how to implement the system. Considering this discussion, local government clearly needs a formal and integrated risk management system. Just what this system could be is the focus of the next two chapters of this thesis.

CHAPTER 8 : SOURCES FOR DEVELOPING A RISK MANAGEMENT FRAMEWORK IN LOCAL GOVERNMENT

8.1 Introduction

The focus throughout this thesis has been the risks that appear in post-decentralization Indonesian local government finance and how they can be best managed. As presented in earlier chapters, the study used three techniques for identifying risks that influence local government in achieving its objectives: a survey, a self-risk assessment, and in-depth interviews in three local governments. A common finding across all these data sources is that human resource related risks, legal risk, political intervention, and financial and fraud risks are some risks or risk groups that are significant to Indonesian local government finance.

The thesis has also found that these risks affect the performance of local government in delivering its full breadth of services. Some risks, such as failure in planning and setting policy, may influence not only the local government entity itself, but also the wider society as the beneficiary of planned developments or policies. Other risks, for example fraud risk, legal risk, and fiscal risk, are risks that take place inside of local government management but, again, their existence not only affects the internal workings of local government but has broader consequences. It demonstrates that local government can be a source of risks, which supports the existence of Beck's proposition that the state is a source of risks (Beck, 2006).

Chapter 6 and Chapter 7 described efforts of local governments to manage risks. Analysis was conducted against Indonesian government regulations and international standards for risk management. This analysis indicated that risk management efforts within local government are weak, which in turn influences their effectiveness. Risk assessment, as a part of a government internal control system (SPIP) mandated by Government Regulation Number 60/2008, was not applied by all local governments due, in part, to a lack of enforcement; no sanctions exist for noncompliance with the regulation. Set against international standards (ISO 31000:2009), each component required by the standard was not completely fulfilled by local government, and only about half of local governments stated that they conduct formal risk management.

Furthermore, in-depth exploration of local government efforts in managing risks has demonstrated that these are often a reaction to current problems or risk events. Considering that there are inherent weaknesses in the existing risk controls, and the substantial risks that have been identified, local government needs a solid system for managing risks. However, the implementation of the current available system, SPIP, is still in the very early stages due to lack of mandate enforcement, guidance and commitment. These three factors together influence the effectiveness of the implementation.

The lack of a system-wide approach to managing risk raises further questions in post-decentralization local government. How can these risks be better identified and managed in the context of local government? It is proposed that local government should develop a formal and integrated risk management framework that is suitable for Indonesian local government circumstances based on consideration of the weaknesses and obstacles in implementing the existing system, SPIP. Further, the framework should be based on current regulation as a mandate for implementation, and should fulfil the requirements of international standards (ISO 31000:2009). This chapter discusses these matters as sources for developing a risk management framework within Indonesian local government.

This chapter consists of two sections. The first section explores weaknesses of, and obstacles to, implementing the current system for managing risks as a starting point for improving the approach. This is based on the interview and survey data discussed in earlier chapters. The second section discusses international standards and Indonesian regulations that might be used as reference points for developing an effective risk management system. International standards give a framework that aligns with international best practices. Further, discussion regarding Indonesian government regulation provides an understanding of the foundations of the existing system. As has been explained fully in earlier chapters, regulation is a mandate for the implementation of a system in local government. The description of the standards and the regulation is mostly based on review of related standards and regulations.

8.2 Weaknesses and Obstacles in Current Approaches to Risk Management in Local Government

As discussed in Chapter 7, there are two approaches to risk control in Indonesian local government that have been identified through this research: as reaction to problems or risk events and the implementation of a government internal control system known as SPIP. The reactive approach contains weaknesses that affect its effectiveness. These weaknesses include that it is conducted sporadically and informally and is not carried out in a systematic manner. The approach is not well documented and not standardized and lacks formal guidance. Therefore, it is not easy to replicate. These issues may trigger other problems, such as legal risks.

In contrast, SPIP is a formal system that is available for managing risk in local government. A regulation (PP 60/2008) obligates each mayor or regent to enact local regulation for the implementation of SPIP (Republic of Indonesia, 2008c). As reported by the respondents, each local government in Indonesia already has such a local regulation for implementing SPIP. However, according to the findings of the current study, the implementation of SPIP has not demonstrated significant progress. The survey conducted for this study, although the response rate was low, indicated that only 50% of respondents, from both the local government and agency levels, stated that their entities implemented formal risk management. Further, only 41.11% and 38.89% of respondents for local government and agency levels, respectively, conducted risk assessment as mandated in regulation. Furthermore, as discussed in Chapter 7, SPIP implementation was still in its very early stages. There are currently two stages of SPIP implementation, especially in regard to risk assessment: enactment of regulation regarding SPIP implementation and more advanced briefings about SPIP to upper echelons in local government.

This current section describes weaknesses and obstacles in implementing SPIP, especially the risk assessment component, which is obligated by regulation. In this context, weaknesses relate to flaws in current practices of risk assessment, and obstacles are factors that prevent effective implementation of risk assessment. The aims of identifying weakness and obstacles is to provide advice on how to best improve the current practices and reduce the factors that prevent implementation and, further, ultimately develop a risk management system that is suitable for local government circumstances in the Indonesian context.

8.2.1 Weaknesses of current practices for managing risk

According to the survey results discussed in Chapter 6, risk assessment has not been formally conducted. The objectives of risk assessment were not clearly defined and there were no risk criteria and indicators. Further, there were no standard procedures that aligned with regulations. Although some local council respondents said they had an approach to risk management, there were few examples of a coherent policy framework in place. In addition, there were weaknesses in problem/risk mapping, and risk assessment was conducted based on subjective evaluation, assumptions and past years' experiences. Despite the fact that subjective interpretations play a part, a more formalized and objective assessment is required by any risk management system. One of the research findings is that controls for management of risks were not structured and were more likely to be incidental. Risk assessment processes were also inconsistent. The survey also identified that the process for managing risk was too complicated. Further, risk assessment was not a comprehensive and integrated system. It was conducted during the execution stages of the local government financial cycle, and not during planning activities. One of the implications of an unstructured and informal risk management system is that it affects the achievement of an agency's objectives.

As discussed in Chapter 7, the interviews provided similar results. Most risk controls were carried out via informal approaches in reaction to identified problems. The controls were implemented sporadically, were informal, and were made by instinct. The informality of the system resulted in a lack of documentation of control efforts. Therefore, there were problems in consistency and replication. The informal approach also faced a lack of standard procedures for treating risks.

The interviews also showed efforts to implement a more formal risk assessment following SPIP as mandated by regulation. However, the implementation was still in its very early stages. Control self-assessment, as an effort at SPIP implementation, could not be considered to be an integrated system. CSA was conducted in a separate workshop guided by an external consultant. SPIP, and its risk assessment component, is based on Government Regulation Number 60/2008 (PP 60/2008). According to this regulation, SPIP contains five components: control environment, risk assessment, control activity, information and communication, and monitoring. Furthermore, each component is split into subcomponents and further into sub-subcomponents. The regulation also arranges a kind of checklist of each component in its appendix. The regulation, in total, consists of 128 pages. It is a complicated system. However, there is no practical guidance for its implementation. Most respondents (64.44%) agreed that the process of risk management is too complex.

8.2.2 Obstacles to implementing effective risk management

Despite the fact that implementation of formal risk assessment in Indonesian local government is still in its beginning stages, this research assessed factors that are obstacles to the implementation of effective risk management. The Risk Management Toolkit for NSW Public Sector Agencies identified barriers that influence the effectiveness of risk management. The barriers can cause an agency to fail to realize the benefits of risk management (NSW Treasury, 2012). These barriers were adopted for the current study with modifications in order to align with Indonesian local government circumstances. The barriers were used to assess the same matters from the Indonesian local government perspective. The assessment was conducted via a section of the survey questionnaire, as discussed in Chapter 3. It contained 11 "yes or no" questions and a blank space was provided for respondents to report other factors. The factors are listed in Table 8.1 below.

Table 8.1: Barriers to Effective Risk Management

1. Risk management is not strongly linked to organization objectives
2. Organizations do not have a culture that supports risk management
3. Lack of resources (e.g. time, training, people, money)
4. The processes of risk management are too complex
5. Risk treatment is not based on cost-benefit analysis
6. Identified risks are not significant in decision-making
7. Risk identification and assessment use subjective judgments that have not been challenged or tested
8. Responsibilities (risk and risk owner) are not set clearly.
9. Senior management commitment is lacking
10. Absence of regulation/guidance from central government
11. Absence of regulation/guidance from local government

Source: (NSW Treasury, 2012) Modified

According to the survey, with the exception of factor number 6 (which identifies risks are not significant in decision-making), most respondents agreed that the listed factors affect the effectiveness of risk management implementation in Indonesian local government or, in other words, that they are barriers to effective risk management.

Most of respondents (66.67%) agreed that risk assessments in Indonesian local government are not strongly linked to organizational objectives. Risk assessment was introduced by regulation, and effort has been directed more toward regulatory compliance. This aligns with findings from the interviews described in Chapter 7. None of the respondents mentioned that risk assessment as a part of SPIP is needed in relation to achievement of objectives.

Risk management needs broad engagement across the organization, in addition to a strong commitment and sustained and visible support from senior management (NSW Treasury, 2012). Most (72.22%) respondents agreed that they lack a culture that supports risk management. Furthermore, there was not only a lack of engagement or a supportive culture, but also a lack of commitment from senior management, as shown in the interview findings. Cultural changes in an organization that is in the early stages of risk management implementation need strong commitment from the very top of management (Crawford & Stein, 2004).

Effective risk management also needs sufficient resources, such as funding, time, training, staff, and supporting systems. However, most respondents (93.33%) agreed that they lack for resources for supporting the implementation of risk management. Lack of resources in implementing risk assessment, as a part of SPIP, was described by one respondent:

> At the beginning of SPIP implementation, we should prepare three items: regulation regarding SPIP implementation, implementation guidance and formation of a taskforce. Implementation guidance should involve: what, why, and how to integrate SPIP into management systems and the budget. However, during this process, the regulation and the taskforce were finished and formed, but the guidance, including funding arrangements, has never been completed. (404, 2014)

This aligns with a study on the early stages of the United Kingdom's local authorities in implementing risk management. According to Crawford and Stein (2004), UK local authorities experienced a lack of staff to follow up and facilitate procedures of risk management as an indication that risk management had not yet been embedded in the normal activities (Crawford & Stein, 2004). This was a theme in the previous chapter, which examined risk management more closely.

Risk treatment, as part of risk management, should be cost effective, practicable and commensurate with the level of risk (NSW Treasury, 2012). In other words, it should give enough benefit in relation the amount of money it costs. In the survey, 74.44% of respondents agreed that risk treatment is not based on cost-benefit analysis. However, more than half of respondents (55.56%) agreed that identified risks were significant in decision-making. The risks were described correctly, not too broad or at too low a level. Identifying and describing risks at the correct level is very important for supporting an organization's decision-making. Crawford and Stein suggest that risks should be filtered and managed by the suitable level for gaining the benefit of risk management (Crawford & Stein, 2004).

As mentioned earlier, subjective evaluation is a weakness of current risk assessments. The weakness impacts the effectiveness of risk management itself. Most (77.78%) respondents agreed that risk assessment that uses subjective judgment and was not challenged and tested was a barrier to effective risk management. There is no clear demarcation of who is responsible as risk owner and who is to treat the risks. Most respondents (81.11%) agreed that this also prevents effective risk management.

According to the interviews presented in Chapter 7, lack of commitment and guidance are the main causes of the slow implementation of SPIP. A similar finding was reached by the survey. Most respondents (72.22%, 71.11% and 75.56%) stated that lack of senior management commitment, absence of guidance from central government, and lack guidance from local government, respectively, were obstacles in implementing effective risk management. Furthermore, the respondents added that lack of staff commitment also prevented the implementation of effective risk management.

However, this study finds a contradiction on this point. Despite the fact that the respondents claimed that a reason for the slow adoption of SPIP was lack of guidance from central government, there were actually 26 books of technical guidance, which explain each component of SPIP and other guidance including guidance for conducting risk assessments prepared by BPKP as mandated by PP 60/2008 (www.bpkp.go.id). Ineffectiveness of the guidance is caused by absence of a strong mandate for enforcing the implementation of the guidance. Guidance is enacted with a Head of BPKP regulation, however BPKP does not have authority to force local government to use the guidance. A respondent identified it as an obstacle:

> We, BPKP, cannot force local government to implement SPIP . . . We do not have decentralization authority, for example there is no clear working relation between us and the local audit office. (404, 2014)

Therefore, it is understandable that local government officers perceive a lack of guidance from central government. Claims of respondents, as discussed earlier, that SPIP implementation is still in its early stages, support this condition.

Results of the survey regarding obstacles to effective risk management are summarized in Table 8.2 below.

Table 8.2: Obstacles to Effective Risk Management Implementation

Obstacles of Effective Risk Management Implementation	Respondents		Percentage	
	Yes	No	Yes	No
1. Risk management is not strongly linked to organizational objectives	60	30	66.67%	33.33%
2. Organizations do not have a culture that supports risk management	65	25	72.22%	27.78%
3. We lack resources (e.g. time, training, people, money)	84	6	93.33%	6.67%
4. The processes of risk management are too complex	58	32	64.44%	35.56%
5. Risk treatment is not based on cost-benefit analysis	67	23	74.44%	25.56%
6. Identified risks are not significant in decision making	40	50	44.44%	55.56%
7. Risk identification and assessment use subjective judgements that have not been challenged or tested	70	20	77.78%	22.22%
8. Responsibilities (risk and risk owner) are not set clearly.	73	17	81.11%	18.89%
9. Senior management commitment is lacking	65	25	72.22%	27.78%
10. Absence of regulation/guidance from central government	64	26	71.11%	28.89%
11. Absence of regulation/guidance from local government level	68	22	75.56%	24.44%

Some respondents added other factors that affect the efficacy of risk management implementation. The respondents stated that risk management was still not an integrated system in local government financial process. It should be integrated into local government management, informed to all apparatus, included the head of agencies and the staffs, therefore they can identify, communicate and control their risks aligning to their own authorities. Furthermore, respondents stated that there should be coherence between management and regulation in an integrated system, so that implementation of the regulation operates in parallel with local government activities.

Aligning with previous discussion, some respondents stated that the informality of risk management is a barrier to its effective implementation. The respondents wrote that there was commitment from the top management on risk management. However, it had not been realized in formal regulation specifically regarding risk management. Furthermore, there was no formal and structured risk management implementation in local government, therefore the risks were treated incidentally and informally.

Lack of communication and coordination also prevented effective risk management implementation. The respondents stated that there was a lack of control and communication between senior management and staff. It caused a gap in implementation. There was no common agreement regarding the kind of system required and the needs of the system. Furthermore, there was a lack of coordination among government levels regarding risk assessment.

Supporting earlier discussions, as explored thoroughly in Chapter 7, respondents stated that human resource factors also affected the effectiveness of risk management implementation. There was a mindset that risk management is not important in the public sector. Further, there was also negative behaviour and attitudes among government officers, including laziness, lack of creativity, and not wanting to well understand their own job. These factors trigger ignorance of the system.

The weaknesses and barriers discussed, individually and/or together, affect the implementation of risk management in Indonesian local government. Therefore, a developed system or framework of risk management should eliminate or, at least decrease, their impact. Furthermore, the weaknesses and the barriers of the current system should be the main consideration in developing a capable risk management system.

8.3 Regulation and Standards as a Foundation for Developing a Risk Management Framework

The previous section discussed weaknesses and barriers in the current system of managing risks and the importance of considering them in the development of a formal, integrated risk management system for Indonesian local government. However, there are other factors that should also be considered in developing a system: international risk management standards, Indonesian regulations and the needs and role of local government. The standards give an international best practice perspective, whereas the regulations and the needs and role provide local context. The international standards and the regulations are described in this section, and the needs of local government will be demonstrated in the next chapter.

8.3.1 Regulation

Government Regulation Number 60/2008, referred to a PP 60/2008 (*Peraturan Pemerintah nomor 60/2008*) was enacted on August 28, 2008 as a follow up to Law Number 1/2004 regarding the state treasury. Clause 58 of the law states that the President, as the head of government, regulates and organizes a comprehensive system of government internal control in order to improve performance, transparency, and accountability in government financial management (Republic of Indonesia, 2004a). PP 60/2008 consists of three sections: the law, the explanation and the appendix. The law contains four chapters and 61 clauses that are explained in the explanation section. The appendix contains internal control checklists consisting of a preface, five parts on internal control components, and an overall summary of internal control. A fuller description of the regulation is provided in Appendix E.

Studies have been conducted on the implementation of PP 60/2008 regarding SPIP in local government. Yurniwati and Rizaldi (2015) analyzed one component of SPIP, the control environment, in an Indonesian local government. They concluded that the condition of the control environment was determined by leadership factors of the mayor or regent. Further, establishing a positive and conducive control environment contributed to the success of SPIP implementation. These findings align with a study by Ibnu (2009), which concluded that the effectiveness of SPIP is determined by the control environment as a manifestation of leadership. Furthermore, Zumriyatun (2010) argued that success of SPIP implementation relies on commitment of the mayor or regent (as cited in Yurniwati & Rizaldi, 2015).

An important conclusion can be derived from the regulation. Explicitly, the regulation addresses implementation of internal control (SPIP) in a government institution. However, it also orders the leaders of government institutions to manage risk. According to ISO 31000:2009, a mandate is required for implementation of risk management. PP 60/2008 should be seen as such a mandate for local government for managing risk. A comparison of the arrangement of PP 60/2008 and ISO 31000:2009 in managing risk is discussed in the next section.

8.3.2 Comparison of the ISO standard and the Indonesian regulation

As raised earlier in this thesis, ISO 31000:2009 is a standard known internationally for risk management. It specifies principles and guidelines for risk management. This standard was introduced by the International Organization for Standardization (ISO) on November 15, 2009. The standard consists of five sections: scope, term and definition, principles, framework and process.

As stated in the scope section of the standard, the standard provides principles and general guidelines for any kind of body, **including public organizations**, private or community enterprises, associations, groups, and individuals. Furthermore, the standard can be used as guidance for risk management throughout the life of an organization, and to widen the scope of activities, involving strategies and decisions, operations, processes, functions, projects, products, services and assets. As well, the standard can be used in managing any type of risk, whatever its characteristics and consequences (ISO, 2009). Since scope of the ISO involves public organization, the standard is relevant for Indonesia public sector, and appropriate guidance for managing risk in Indonesian local government. However, considering failure of NPM model or western imposed managerial practices, which as exemplified in Chapter 1, ISO 31000:2009 should be used carefully as a source for developing a risk management framework for Indonesia local government. In order to develop a framework, substances of the standard should be adapted to fit with Indonesia's specific characteristics, such as regulations and needs of local government.

A comparison of the substance of the international standard and regulation PP 60/2008 will identify whether the regulation aligns with the standard as a start point for adopting standard in developing local government risk management framework. This comparison will also identify components of the regulation that should be fulfilled in order to harmonize it with the standard. The analysis is needed for the reason that PP 60/2008 was enacted before the standard was published and, as such, the standard was not adopted by the regulation. Considering the paucity of studies on implementation of the ISO standard in Indonesian circumstances, particularly in the public sector, this analysis is important for understanding the standard from the perspective of Indonesian regulation.

In the following subsections, the focus is on comparing regulation PP 60/2008 and ISO 31000:2009 following the substance of the standard, including the framework and processes of risk management. The comparison identifies the absence of clauses or arrangements in the regulation for accommodating the substance of the standard. This analysis can then be used for developing a risk management framework that aligns with both the international standard and the regulation.

8.3.2.1 Framework for managing risk

At the outset, it is important to note that it is not easy to compare the ISO framework and the Indonesian regulation as the regulation and the standard use different approaches. ISO's framework and processes of risk management tend to use a process approach. The framework and the processes establish a series of activities for managing risk (ISO, 2009). In contrast, PP 60/2008 uses a components approach that is demonstrated by a list of components that should be fulfilled (Republic of Indonesia, 2008c). The standard introduces a framework of risk management that consists of five stages that are interrelated in an iterative manner: mandate and commitment, design of framework for managing risk, implementing risk management, monitoring and review of the framework, and continual improvement of the framework.

The first and most important component of the ISO framework is the mandate and commitment. Effective risk management requires decisive and sustained commitment (ISO, 2009). PP 60/2008 is certainly a mandate for implementing risk management through SPIP. Clause 13 of the regulation states that the leaders of government institutions in Indonesia are obligated to carry out risk assessment that is integrated with the organizations' activities. Further, in Clause 60, the regulation requires a regent's or mayor's regulation for further implementation of the system (Republic of Indonesia, 2008c). However, as discussed earlier in Chapter 7, the lack of a mandate and commitment is a major problem in managing risk in local government. It has been shown that PP 60/2008's mandate for managing risk is not strong enough to enforce its implementation by local governments. Further, as discussed in Chapter 7, though all local governments already have a regent or mayor's regulation in accordance with Clause 60 of PP 60/2008, lack of commitment causes the implementation to be stuck at an early stage. Therefore, strengthening the mandate and commitment is an important step in applying effective risk management in Indonesian local government.

The next step of the ISO 2009 standard is designing a framework for managing risk. The design involves subprocesses that should be considered. Understanding the internal and external context of an organization is a requirement for tailoring the risk management design. The internal and external factors can significantly affect the design of the framework (ISO, 2009). The external and internal contexts are presented in Table 8.3.

Table 8.3: Contexts for Designing the Framework

No.	Context of risk management framework
External	
1	The social, cultural, political, legal, regulatory, financial, technological, economic, natural and competitive environment, whether international, national, regional or local
2	Key drivers and trends having impact on the objectives of the organization
3	Relationships with, and perceptions and values of, external stakeholders
Internal	
4	Governance, organizational structure, roles and accountabilities
5	Policies, objectives, and the strategies that are in place to achieve them
6	Capabilities, understood in terms of resources and knowledge (e.g. capital, time, people, processes, systems and technologies)
7	Information systems, information flows and decision making processes (both formal and informal)
8	Relationships with, and perceptions and values of, internal stakeholders
9	The organization's culture
10	Standards, guidelines and models adopted by the organization
11	The form and extent of contractual relationships

Source: ISO 31000:2009 p.10

The standard requires an organization to establish a clear risk management policy that states objectives and commitments relating to risk management implementation. This policy is also to include justification, accountability and responsibility, and commitment to allocate resources and to make continual improvement of the policy and the framework (ISO, 2009). The design of the framework also establishes accountability, authority, and appropriate competence for managing risk and, further, how to integrate it into an organization's practices and processes. The design of the framework should include planning the allocation of resources for implementing risk management. These include human resources (skills, experience and competence), the system, documentation, information and knowledge management systems, and training programs. The design of the framework also arranges mechanisms for internal and external communication. Internal communication is an effort to encourage accountability and ownership of risk. Further, the organization also needs to communicate with external stakeholders. The design of the risk management framework should be a comprehensive plan for implementing risk management.

Based on the design, risk management is implemented in two processes: implementing the framework for managing risk and implementing the risk management process. The processes are not separable, for the reason that effective risk management processes depend on the foundations and organizational arrangements provided by the framework. The foundations include policy, objectives, and a mandate and commitment to manage risk. The organizational arrangements involve plans, relationships, accountabilities, resources, processes, and activities (ISO, 2009). Implementation of risk management is followed up with monitoring and reviewing on the framework. Monitoring and reviewing is intended to carry out continual improvement of the framework, policy and plans of risk management. This should lead to improvement of an organization's management of risk and its risk management culture.

In contrast, PP 60/2008 does not specify how to implement risk management (the framework and the processes), for the reason that it is not specifically enacted for risk management. It only regulates that the regent or mayor is obligated to implement control (SPIP) on government activities, and that the implementation of SPIP (including risk assessment) in a local government level is to be arranged through a further regent or mayor's regulation. Furthermore, though in substance the regulation mentions risk assessment and control activities, the functioning of the system is measured by fulfillment of components or points as provided in checklists.

Designing, implementing, monitoring, reviewing, and improving the framework are important parts in developing a formal and integrated risk management system in Indonesian local government, and should be arranged based on local government circumstances and needs.

8.3.2.2 The process of risk management

The ISO standard presents risk management processes as the application of management policies, procedures and practices in systematically managing risk. According to the standard, the risk management process consists of five main activities: communication and consultation, establishing the context, risk assessment, risk treatment, and monitoring and review. The standard includes an important activity—recording the risk management process in order to make risk management traceable and provide a basis for improving the process, including methods and tools. The next discussion compares risk management process between the ISO and PP 60/2008.

8.3.2.2.1 Communication and consultation

The ISO standard states that communication and consultation with internal and external stakeholders should be carried out at all stages of the process. This step is important because stakeholders make judgments about risks based on their perceptions, and this can be vary among stakeholders due to differences in their values, needs, assumptions, concepts, and concerns (ISO, 2009). PP 60/2008, in clauses 41 and 42, stipulates that the leader of an institution is obligated to effectively identify, record, and communicate information in the proper form and time. Further, as explained in the appendix, information and communication in PP 60/2008 relates to managing external and internal information and its distribution in achieving organizational objectives. It also describes communication that should be carried out effectively by institutions with external and internal stakeholders (Republic of Indonesia, 2008c). This part does not expressly mention communication and consultation relating to the implementation of risk management. However, it considers factors, both internal and external, that can be used to identify control weaknesses, and then used as foundations for making improvements. Therefore, the clauses and appendix can be used as a basis for communication and consultation activities to be customized as a part of the risk management process in local government.

8.3.2.2.2 Establishing the context

One of the early steps of the risk management process is establishing context. As mentioned earlier, the ISO standard is not intended to promote uniformity in risk management, and this is reaffirmed in one of its principles: that risk management is to be tailored to and aligned with an organization's external and internal context and risk profile (ISO, 2009). Therefore, this step will yield risk management characteristics that are specific to an organization. According to the standard, establishing the context should include clearly enunciating an organization's objectives, defining the organization's external and internal context, and setting the organization's risk criteria and scope. Further, the organization's context involves the external and internal context of the risk management process. The context can involve, but is not limited to, factors as listed in Table 8.4.

Table 8.4: Factors Considered in Establishing Context

The Factors	
1. The external context	
	1. The social and cultural, political, legal, regulatory, financial, technological, economic, natural and competitive environment, whether international, national, regional or local 2. Key drivers and trends having impact on the objectives of the organization 3. Relationships with, perceptions and values of external stakeholders
2. The internal context	
	1. Governance, organizational structure, roles and accountabilities 2. Policies, objectives, and the strategies that are in place to achieve them 3. Capabilities, understood in terms of resources and knowledge (e.g. capital, time, people, processes, systems and technologies) 4. The relationships with and perceptions and values of internal stakeholders 5. The organization's culture 6. Information systems, information flows and decision-making processes

	(both formal and informal) 7. Standards, guidelines and models adopted by the organization 8. Form and extent of contractual relationships
3. The context of the risk management process	
	1. Defining the goals and objectives of the risk management activities 2. Defining responsibilities for and within the risk management process 3. Defining the scope, as well as the depth and breadth of the risk management activities to be carried out, including specific inclusions and exclusions 4. Defining the activity, process, function, project, product, service or asset in terms of time and location 5. Defining the relationships between a particular project, process or activity and other projects, processes or activities of the organization 6. Defining the risk assessment methodologies 7. Defining the way performance and effectiveness is evaluated in the management of risk 8. Identifying and specifying the decisions that have to be made, and 9. Identifying, scoping or framing studies needed, their extent and objectives, and the resources required for such studies.
4. Defining risk criteria	
	1. The nature and types of causes and consequences that can occur and how they will be measured 2. How to define likelihood 3. The timeframe(s) of the likelihood and/or consequence(s) 4. How to determine the level of risk 5. The views of stakeholders 6. The level at which risk becomes acceptable or tolerable, and 7. Whether combinations of multiple risks should be taken into account and, if so, how and which combinations should be considered

Source: (ISO, 2009, pp. 15-17)

Establishing context involves defining risk criteria. This is an important activity because risk criteria will be used to evaluate risks and whether they should be treated or not by describing and defining causes, consequences, likelihoods and levels of risk. Risk criteria are to reflect the organization’s values, objectives and resources (ISO, 2009). Relating to risk criteria, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) uses the term "risk appetite" for describing the amount of risk that an organization is willing to accept in pursuit of value (Rittenberg & Martens, 2012). Regarding risk appetite, Power (2009) suggested that it could be useful to focus on risk appetite as "a process for representing and intervening in the complex ecology of operational values and shifting ethical limits" (Power, 2009, p. 854).

PP 60/2008 does not explicitly specify an activity for establishing the context. However, some clauses and parts of the regulation do describe arrangements relating to defining an institution's specific circumstances in conducting risk assessment. According to the regulation, in order to assess the risk, a government institution should determine its objectives at the institution and activity levels. The regulation and its appendix clarify that the leader of the government institution defines overall objectives in the form of missions, objectives, and targets as stated in a strategic plan and annual performance plan. Activity level objectives should be based on the objectives and strategic plan of the institution (Republic of Indonesia, 2008c). This step of risk assessment based on PP 60/2008 aligns with ISO 31000:2009.

In establishing an organization's external context, there are similarities between the ISO standard and PP 60/2008. In the appendix of PP 60/2008, the regulation presents external factors that should be considered in risk assessment, such as advancements in technology, changes to regulation, natural disasters and terrorism, and changes to the business environment, politics and economy. Similarly, the ISO standard describes the external context as involving social and cultural factors, politics, regulation, finance, technology, economics, and the natural and competitive environment across international, national, regional and local areas. Further, the standard also mentions factors of the external context such as key drivers or trends that affect achievement of objectives and the perceptions and values of external stakeholders. However, PP 60/2008 also differs from the ISO standards. PP 60/2008 describes external factors that are specific to Indonesian circumstances, such as the expectation of changes to legislation and society, main contractors, nongovernment and other government institutions, and dependence on contractors in important activities.

There are similarities between ISO 31000:2009 and PP 60/2008 in regard to factors that should be considered in establishing internal contexts. The standard requires consideration of governance, organizational structure, roles and accountabilities, whereas PP 60/2008, relating to these areas, focuses on the institution leader, including changes to his or her needs or expectations, and changes to his or her responsibilities. Further, relationships with internal stakeholders, their perceptions and values, also influence organizations in managing risk. PP 60/2008 mentions that interaction with other government institutions (in the same local government) should be examined as an internal factor.

The standard suggests that resources and knowledge should be taken into account in establishing the internal context. As mentioned earlier in the discussion of the framework, resource matters are important to the design of a risk management framework, and are also a manifestation of strong commitment in managing risk. In this context, PP 60/2008 suggests factors that should be taken into consideration in assessing risk: reduction of activities, lack of new program funding, lack of employees (both in competency and quantity), weaknesses in employee management and training, and business process engineering or operational process redesign. These factors can significantly affect risk management processes. For example, lack of new program funding, especially if the new program is the implementation of risk management, can be real obstacle, for the reason that providing resources, including funding, demonstrates the commitment of local government management to managing risk. Therefore, lack of funding and lack of commitment obstruct the implementation of risk management. Information systems are another resource that has an important role in managing risk. However, the ISO standard and PP 60/2008 present different perspectives on information systems. The standard includes information flows and decision-making processes as factors of the internal context. In regard to information systems, PP 60/2008 proposes that disruption of information system processing and availability of backup systems are issues that should be taken into account in risk assessment.

PP 60/2008 suggests that the applications of a decentralized program and unauthorized access to critical assets are important factors that influence risk assessment. As discussed in previous chapters, decentralization was a significant change to the Indonesian public sector, especially in regard to its impact on the responsibilities of local government. The importance of policy in risk management is in accordance with ISO 31000:2009. The standard mentions that policies, objectives, and the strategies in place to achieve them are part of the internal context of the risk management process.

There are some internal contexts proposed by the standard that are not clearly stated in the regulation. The organizational culture, standards, guidelines, and models adopted by the government institution are some examples of these. Furthermore, the regulation also does not explicitly mention the context of the risk management process as stated in the standard. This relates to the objectives, strategies, scope, and parameters of the activities, or those parts of the organization where the risk management process is being applied, such as defining goals and objectives of the risk management process, responsibilities for and within the process, the scope of the risk management process, determining risk assessment methodologies, and the way performance and effectiveness is measured in the risk management. Therefore, factors that ensure that an approach to risk management is appropriate to the circumstances, the organization, and the risk should be defined in determining the context of local government risk management.

The last part of establishing the context is defining the criteria to be used to evaluate the significance of the risk. According to the ISO standard, risk criteria can be derived from legal and regulatory requirements and should be consistent with the risk management policy. PP 60/2208 does not clearly state which matters should be considered in defining risk criteria. However, PP 60/2008 mentions that the leader of a government institution should apply prudential principles in setting acceptable risk levels. Further, risk criteria and risk levels should be determined by the leader. Approaches for determining acceptable risk level vary across government institutions depending on inherent differences in function and risk tolerance. The applied approach is designed to maintain a reasonable level of acceptable risk, and the leader of the government institution is responsible for its implementation (Republic of Indonesia, 2008c).

The comparison between ISO 31000:2009 and PP 60/2008 in terms of establishing the context of risk management is summarized in Table 8.5.

Table 8.5: Comparison between ISO 31000:2009 and PP 60/2008 in Establishing Context

No.	ISO 31000:2009	PP 60/2008	References in PP 60/2008
A. The external context		Government institution should consider risks caused by **external factors**, such as:	Appendix, Part II.C
	1. The social and cultural, political, legal, regulatory, financial, technological, economic, natural and competitive environment, whether international, national, regional or local;	1. Technology advancement 2. Changes in regulation 3. Natural disaster, crime and terrorism 4. Changes of business environment, politics, and economy.	
	2. Key drivers and trends having impact on the objectives of the organization;	5. Need or expectation changes of local legislative branch and society	
	3. Relationships with, perceptions and values of external stakeholders	6. Main contractor 7. Interaction with non-government institution and other government institution. 8. Dependency on contractor or other parties in important activities	
B. The internal context		Government institution should consider risks caused by **internal factors**, such as:	Appendix, Part II.C
	1. Governance, organizational structure, roles and accountabilities	1. Need or expectation of changes of institution leader 2. Major changing the institution leader's responsibility	
	2. The relationships with and perceptions and values of internal stakeholders;	3. Interaction with other government institution	
	3. Capabilities, understood in terms of resources and knowledge (e.g. capital, time, people, processes,	4. Reduction of activities and employees	

No.	ISO 31000:2009	PP 60/2008	References in PP 60/2008
	systems and technologies);	5. Unavailability of funds for new programs or unfinished programs 6. Weaknesses of employee management 7. Lack of employee competency and training 8. Business process reengineering or operational process redesign	
	4. Information systems, information flows and decision making processes (both formal and informal);	9. Disruption of information system processing and availability of backup systems	
	5. Policies, objectives, and the strategies that are in place to achieve them;	10. Application of decentralized programs 11. Unauthorized access to critical assets	
	6. The organization's culture; 7. Standards, guidelines and models adopted by the organization; and 8. Form and extent of contractual relationships	Not mentioned clearly	
C. The context of the risk management process		Not mentioned explicitly	
	1. Defining the goals and objectives of the risk management activities; 2. Defining responsibilities for and within the risk management process; 3. Defining the scope, as well as the depth and breadth of the risk management activities to be carried out, including specific inclusions and exclusions; 4. Defining the activity, process, function, project, product, service or asset in terms of time and location; 5. Defining the relationships between a particular project,		

No.	ISO 31000:2009	PP 60/2008	References in PP 60/2008
	process or activity and other projects, processes or activities of the organization; 6. Defining the risk assessment methodologies; 7. Defining the way performance and effectiveness is evaluated in the management of risk; 8. Identifying and specifying the decisions that have to be made; and 9. Identifying, scoping or framing studies needed, their extent and objectives, and the resources required for such studies.		
D. Defining risk criteria			
	1. The nature and types of causes and consequences that can occur and how they will be measured; 2. How to define likelihood; 3. The timeframe(s) of the likelihood and/or consequence(s); 4. How to determine the level of risk; 5. The views of stakeholders; 6. The level at which risk becomes acceptable or tolerable; and 7. Whether combinations of multiple risks should be taken into account and, if so, how and which combinations should be considered	The leader of government institution should apply prudential principles in setting of acceptable risk level	Clause 17 (2), Appendix Part II D
		Risk criteria (low, medium, and high) was determined	Appendix, Part II.D
		Approach for determining of acceptable risk level varies across government institutions depending on variance and risk tolerance. The applied approach is designed in order to maintain reasonable levels of acceptable risk remain, and the leader of government institution should be responsible for its implementation.	

Sources: ISO 31000:2009 and PP 60/2008

8.3.2.2.3 Risk assessment

According to ISO 31000:2009, risk assessment consists of three activities: risk identification, risk analysis and risk evaluation. Risk identification is intended to produce "a comprehensive list of risks that might create, enhance, prevent, degrade, accelerate or delay the achievement of objectives" (ISO, 2009) p.17). Risk identification defines sources of risks, areas of impact, events and their causes, and the potential consequences. Then, risk analysis develops an understanding of the identified risks, involving the determination of consequences and their likelihood and, as a result, an assigned level for the risk consistent with established risk criteria. Risk analysis is an input for risk evaluation. In risk evaluation, the risk level is compared with risk criteria to determine whether a risk needs treatment and the priority for implementing any treatment. The decision should consider the context and the tolerance of the risk and be in accordance with legal regulations and other requirements.

The standard suggests that risk assessment involves three activities; PP 60/2008 applies two sub processes of risk assessment. Under PP 60/2008 the leader of a government institution is obligated to carry out risk assessment that consists of risk identification and risk analysis. Risk identification is to apply a methodology that is appropriate for the institution and its objectives. Government institutions use qualitative and quantitative methods for identifying risks and determining the level of risk. Further, identified risks are analyzed to determine the impacts of the risk on the achievement of objectives, the importance of the risk, and the likelihood of each identified risk. This step also involves defining formal and informal processes for risk analysis based on daily activities. Further, risk analysis considers the best way to manage or mitigate risk, and the actions that should be applied. In this step, control activities for mitigating overall risk and risk in each activity have been determined, and their implementation will be monitored.

Though on the surface there are differences in the sub processes between ISO 31000:2009 and PP 60/2008, in substance both approaches are similar. Though PP 60/2008 does not explicitly mention a risk evaluation step, risk evaluation is involved in the risk analysis, such as making decisions in controlling the risk. Basically, risk assessment is a process for identifying risk, defining importance, impact and level of risk, comparing risk levels with risk criteria, determining whether risks should be treated, and consideration of alternatives for treating risks based on circumstances.

8.3.2.2.4 Risk treatment

According to ISO 31000:2009, risk treatment means selecting and implementing one or more options for modifying risks. The options can be applied individually or in combination, and the implementation should consider their costs and benefits. Some alternatives mentioned in the standard are avoiding risk, taking or increasing the risk, removing the source of the risk, changing the likelihood, changing the consequences, sharing the risk and retaining the risk by informed decision. Risk treatment should integrate monitoring to evaluate whether risk treatment measures remain effective. The standard also introduces a risk treatment plan for documenting the implementation of the chosen options (ISO, 2009). Important information relating to risk treatment implementation is included in the plan, such as:

a. the reasons for selection of treatment options, including expected benefits to be gained;
b. people who are accountable for approving the plan and those responsible for implementing the plan;
c. proposed actions;
d. resource requirements including contingencies;
e. performance measures and constraints;
f. reporting and monitoring requirements; and
g. timing and schedule. (ISO, 2009, p. 20)

In contrast, PP 60/2008 does not explicitly mention risk treatment. It uses the term “control activity” to describe efforts to manage risk. In its appendix, the regulation defines control activities as “policy and procedures that can help ensure the implementation of directives by government agencies leaders for reducing the risk identified in risk assessment” (Republic of Indonesia, 2008c), p.33) Furthermore, the appendix also states that all relevant objectives and risks for each important activity are to be identified and government institutional leaders are to determine needed actions and control activities for managing risk, and provide direction for their implementation. In substance the control activity in PP 60/2008 is similar to risk treatment in ISO 31000:2009. It is an activity for modifying identified risks. Further, the standard defines that risk treatment involves a cyclical process of assessing risk treatment, deciding whether residual risk levels are tolerable, generating new risk treatments for intolerable risk and assessing the effectiveness of these treatments. Regarding implementation of risk treatment, PP 60/2008 in suggests that personnel are to review implemented control activities and avoid excessive control activities. Furthermore, periodically, control activities should be evaluated to ensure that these activities are still appropriate and working as expected.

There are some differences in perspective between PP 60/2008 and ISO 31000:2009 with regard to risk treatment. PP 60/2008 assumes risk is a negative, evident in the focus on reducing risk with control activities. In contrast, ISO 31000:2009 looks at risk as a neutral term: it can be positive or negative. This will affect the choice of treatment. The regulation tends to focus on reducing or eliminating risk, whereas the standard considers its possible benefit to an organization. Risk can be taken or increased in order to pursue an opportunity. PP 60/2008's perspective aligns to Beck's proposition that the state is a part of the problems that it is supposed to solve, and politics is seen as source of risk (Beck, 2006). Therefore in PP 60/2008, risk in governmental environment is treated as a negative matter and should be eliminated.

Furthermore, as discussed in earlier sections, whereas ISO 31000:2009 uses a process approach that looks at modifying risks as a flow of processes, PP 60/2008 describes it as components that should be fulfilled based on checklists of control activities. The regulation states that control activities consist of:

a. reviews of government institution performance;
b. human resource development;
c. controls on information system management;
d. physical control of assets;
e. determination of and review of performance indicators and measures;
f. segregation of duties;
g. authorization of transactions and important events;
h. accurate and timely recording of transactions and events;
i. access restrictions to resources and recordings;
j. accountability of resources and recordings; and
k. proper documentation of internal control systems, transactions and important events (Republic of Indonesia, 2008c, p. 33).

Implementation of these control activities can be different among government institutions, depending on the vision, mission and objectives, environment and operational contexts, organizational complexity, history, background and culture, and the risks encountered.

8.3.2.2.5 Monitoring and review

PP 60/2008 does not describe monitoring and review of risk management process, as is suggested by ISO 31000:2009, for the reason that it regulates a system of government internal control, and it is not explicitly about risk management. However, there is similarity between ISO 31000:2009 and PP 60/2008 in this respect. Both suggest that monitoring is needed in order to assess the system, evaluate its effectiveness, and improve it. The standard considers monitoring and review as a planned part of the risk management process involving regular checking. The regulation states that monitoring should be implemented continuously, in response to evaluation, audit recommendations, and other reviews.

An overall comparison of risk management processes between the standard and the regulation as discussed above is summarized in Table 8.6.

Table 8.6: Risk Management Process Comparison between ISO 31000:2009 and PP 60/2008

No	ISO 31000:2009	PP 60/2008	References
1	Communication and consultation	Information and communication	Clauses 41–42 Appendix, Part IV
2	Establishing the context (articulates the objectives, defines the external and internal parameters when managing risk, sets the scope and risk criteria)	In order to access the risks, the leader of the government institution determines an institution's objectives at the institution and activity level	Clause 13, point (3)
		Institution level of objective	Clause 14
		Activity level of objective	Clause 15
		Risks caused by external and	Appendix, Part II.C

No	ISO 31000:2009	PP 60/2008	References
		internal factors are identified properly	
		The leader of a government institution should apply prudential principles in setting acceptable risk levels	Clause 17, point (2)
		Risk criteria (low, medium, and high) are determined	Appendix, Part II.D
3	Risk assessment	Leader of a government institution is obligated in carrying out risk assessment	Clause 13, point (1) Appendix Part II
		Risk assessment consists of risk identification and analysis	Clause 13, point (2)
	Risk identification	Risk identification	Clause 16 Appendix Part II.C
	Risk analysis	Risk analysis	Clause 17 Appendix Part II.D
	Risk evaluation	Not explicitly	

No	ISO 31000:2009	PP 60/2008	References
		mentioned	
4	Risk treatment	Control activities	Clause 18 to Clause 40
5	Monitoring and review	Monitoring	Clause 43 to Clause 46 Appendix Part V

8.4 Conclusion

The discussion in this chapter shows that, without ignoring the variances, there are similarities between ISO 31000:2009 and PP 60/2008 in managing risk, especially at a process level. ISO places a stronger emphasis on the steps for implementing a risk management framework and risk management processes in an organization. There appears to be scope for developing a risk management system in Indonesian local government that uses both the standard and the regulation side by side without contradiction. Implementation of a risk management process in local government also could be a means of implementing SPIP based on PP 60/2008, because the processes are similar. The important matter that is absent from PP 60/2008 is how to implement a risk management framework in local government. The framework for implementing risk management in local government is the focus of the discussion in the next chapter.

CHAPTER 9 : A PROPOSED RISK MANAGEMENT FRAMEWORK FOR LOCAL GOVERNMENT FINANCE

9.1 Introduction

Building on the previous chapter, this chapter presents a risk management system or framework for Indonesian local government. It is a proposal for improving the current system and approaches to managing risks and draws upon understanding gained from the research in this thesis.

As discussed in the last chapter, the implementation of risk management cannot ignore government regulation PP 60/2008, because it is the only regulation in Indonesia that obligates government institutions to manage risk. Implementation of risk management must also consider international standards for managing risk, such as ISO 31000:2009, for the reason that these represent the consensus on best practices as identified by international experts (Preda, 2013). According to Preda (2013), ISO 31000:2009 can be a strong foundation for the risk management process. However, he writes, each organization should implement appropriate "risk management enablers that are not necessarily within the borders of the standard," such as the risk culture and the organization's best management practices for producing real results in achieving business objectives (Preda, 2013, p. 114). This point emphasizes that implementing risk management in Indonesian local government finance should consider the circumstances and context of local government in Indonesia, including existing implementation of risk management and local needs in regard to managing risk.

Here, I propose a framework for addressing the weaknesses in current risk management practices in Indonesian local government, which impact on financial objectives, with due consideration to existing regulations in Indonesia and the international standard for managing risk. The discussion also takes into account the particular needs of local government in managing risk.

9.2 Developing a Risk Management Framework for Local Government

This section discusses the development of a risk management framework for Indonesian local government based on the ISO 31000:2009 framework. Though there is evidence of failure of NPM and Western imposed model adoption in other countries as described in Chapter 1, the ISO framework is still relevant in tackling risk in Indonesia local government finance by considering specific characteristics and needs of Indonesia public sector circumstances. All activities in Indonesian local government involve risk. Managing risk is needed for ensuring objective accomplishment. However, Indonesia local government has specific needs to do it. The ISO framework for risk management is not intended to propose a management system. It assists an organization, including Indonesian local government, in integrating risk management into its overall management system. Therefore local government 'should adapt the components of the framework to their specific needs' (ISO, 2009, p. 9), and consider establishing the context, a key feature of the ISO standard, in 'revealing and assessing the nature and complexity of its risks' (ISO, 2009, p. v).

Further the framework is needed in order to integrate the risk management process into the organizations' overall governance, strategy and planning, management, reporting process, policies, values and culture (Preda, 2013). In other words, the framework is a process for how to implement a risk management process in an organization to help ensure risk is managed effectively, efficiently and coherently across the organization (ISO, 2009). Developing a framework in this context is not an entirely new development. It is an implementation of ISO 31000:2009 within Indonesian local government circumstances, with consideration of the relevant regulation in Indonesia and the accommodating needs of local government. The specific needs of local government have been determined based on the results of interviews carried out during the current study. This is in accordance with ISO 31000:2009, which specified that that risk management be tailored to specific circumstances, and organizations should adapt the components of the framework to their specific needs (ISO, 2009). In this sense, what I propose is a new framework.

Applying the standard to a specific environment is a complicated task, especially regarding the provision of clear responsibilities, transparency and measurement of the implementation process, increasing participation, and convincing people of the merit in following the standard. Preda (2013) proposed a number of steps for implementing the standard. Preda's steps are presented below and related to the steps of the ISO framework and the context of Indonesian local government. According to Preda, the steps involve:

1. gaining executive management level support for the implementation the standard, including allocation of resources;
2. setting up an implementation committee in which the top management should appoint a member of the organization's management as its representative. People with good knowledge of the organization's processes and good communication skills should be included as members of the committee;
3. creating an implementation plan describing the process, the expertise needed and the roles required;
4. providing training and technical support;
5. organizing awareness activities for communicating to people the aim of implementing the risk management standard, the advantages it offers, how it will work, and their roles and responsibilities;
6. making sure that the standard is based on processes in line with organization's processes;
7. developing risk management documents (policy, plan, process, working instructions);
8. getting management approval for all the implementation documents;
9. publishing and advertising the documents and getting people's feedback;
10. implementing the risk management process;
11. conducting an internal audit;
12. a management review (Preda, 2013, p. 118).

These steps can be grouped into the five components of the ISO framework: mandate and commitment, designing the framework for managing risk, implementing risk management, monitoring and review of the framework and continual improvement of the framework. However, the steps are also similar to the process of system implementation proposed by a respondent in the case study interviews:

> We need enough mandate for implementing a new system with an attached reward and

punishment system. Then we need a taskforce to trigger and pioneer the implementation of the system. We have to prepare our human resources in adopting the new system by developing proper understanding and perceptions regarding the system. We need to have an action plan for implementation and its approaches. We should use top-down and bottom-up approaches simultaneously. The most important aspect is commitment of each level of management and staff for adopting and implementing the system. (401, 2014)

More discussion of the steps and Indonesian local governments' specific circumstances are presented below.

9.2.1 Mandate and commitment

This first step is important for establishing a mandate for and commitment to implementing risk management. The executive or top level management of an organization determines whether risk management is implemented or not. Therefore, gaining commitment from the leadership on risk management is fundamental. According to respondents, a mandate is the first thing required in order to implement a risk management system:

> Implementing a new system should start with a mandate. It can take the form of a formal mayor regulation. (301, 2014)
>
> In implementing a new system, we need a mandate and enforcement mechanism. (105, 2014)
>
> We should make it formal. The implementation of the system should be based on a formal regulation from a certain authority. If it is formalized, anyone responsible will continue to implement the system, because it is mandatory by formal rule. (305, 2014)
>
> Then we need a mandate. It can be a local government regulation or mayor regulation for local government level, and can be an agency head regulation for agency level (310, 2014)
>
> Some prerequisites are needed in preparing a new risk management system. We need continuity, commitment and regulation as guidance. All of us should understand the system, and undertake it in line with the guidance. The new system should be mandatory, because if it is not obligated, the system will not run well. (203, 2014)
>
> A system should be enacted from the top management (formal regulation), arrangement of the system, alignment of all stakeholders' visions and commitment, and change of mindset. (214, 2014)

As discussed in Chapter 7, all local governments have regulation for the implementation of PP 60/2008. This takes the form of a regulation enacted by the regent or mayor. The regulation requires the implementation of SPIP, including risk assessment, in local government. Thus, the formal mandate for implementation is in place. However, the mandate is not sufficiently effective, and the implementation has not been as smooth as expected. A respondent indicated:

> We need further regulation that can enforce local government to implement SPIP. Until now, we encourage local government to enact regent/mayor regulations as their own mandate for implementing SPIP. However, it is not effective. Because the regulation is their own, it is up to them to obey it. Further, there is no sanction clause in the regulation. Therefore, we need a stronger regulation. (404, 2014)

Establishing a strong mandate should be carried out by the enactment of a strong regulation, such as a Ministry of Internal Affairs' regulation, because in the regulation hierarchy it is higher than a regent or mayor's regulation, as mentioned by one respondent:

> Until now we advise local government to enact regent/mayor regulations as their own mandate in implementing SPIP. However, enactment of a regulation from the Ministry of Internal Affairs would be stronger. (404, 2014)

However, the enactment of a minister's regulation is not required in PP 60/2008. The regulation only requires enactment of a regent or mayor's regulation to implement SPIP. Therefore, the possibility of strengthening the mandate, for example by including clauses for reward and punishment, must be done by revising PP 60/2008, although this would be a long process. ISO 31000:2009 suggests that assigning accountabilities and responsibilities at appropriate levels, as a representation of strong commitment, can ensure ongoing effectiveness of risk management (ISO, 2009). Following ISO, a mandate should be treated as inseparable from commitment. A mandate without commitment will never be strong enough to engage with a new system. For example, PP 60/2008 clearly states that it is the responsibility of the regent or mayor to implement SPIP, but, as stated by respondents, this implementation is not effective.

Chapter 7 showed that a lack of commitment is a main obstacle in implementing a risk management system. Therefore, most respondents proposed that establishing commitment is an important part in developing and implementing a system. Respondents indicated that it the commitment of the top leader is an important part in implementing risk management:

> For implementing a new system we also need a leader that has strong commitment. (306, 2014)
>
> Before we implement a system, the first thing that we need is commitment, especially from top management. (308, 2014)
>
> For developing a risk management system, we need commitment from the top leader of local government. For example, we have to improve our human resource management. Recruitment processes should not consider liking and disliking an applicant, but be based on their capacity. And all of this can only be solved by the tone from the top or the commitment of the top leader. (207, 2014)
>
> Developing a new system has prerequisites. Firstly, we need to have a formal legal regulation. Secondly, there is commitment. Thirdly, raising awareness that the system is in our own needs and interests. (204, 2014)
>
> In implementing a new system, commitment is the important thing, especially commitment from heads of units/agencies and echelons. (304, 2014)
>
> Developing of commitment should be initiated by the leaders. They should be role models in implementing the system. (205, 2014)

The commitment of top management is important for keeping the system running well. Developing and implementing a new system is about changing mindsets and behaviours, and this requires leadership. Changes will not take place without commitment. Commitment can also be used as a shield from system distraction, such as political intervention. Some respondents identified the importance of the commitment of top leaders in particular:

> In my opinion, commitment is important. If our top management has commitment, we, the subordinates, will follow. We need commitment in changing improper behaviour. (211, 2014)
>
> The current condition of political factors deeply intervening in our bureaucracy requires strong commitment from the top leader/regent in implementing the new system. (209, 2014)
>
> At the level of local government, we need commitment of the regent, and commitment of the heads of agencies. It should be a need, and it should be formalized. Finally, if there is commitment of all components in local government, the system will be

permanently established. At the moment we are in a process of bureaucracy reformation. We should change our mindset. We should not think about anything else except organizational interests. Now, political intervention and other interests may take place in our process, we should eliminate them. We need our leader's commitment. (202, 2014)

Even though a leader's commitment has a central role in implementing risk management, it is not sufficient. Implementation of a system requires commitment from all components and all management levels because it needs the support of all people involved in the risk management process (ISO, 2009; Preda, 2013). Some respondents described the importance of the commitment of all people in implementing a system. Commitment at all levels was seen to avoid unnecessary conflict in implementing a new system:

We need to implement the system as an obligation. Further, strong commitment should exist in all levels/components, mainly in the top management. If lower levels have strong commitment, but the top does not, the system will not work. Further, if the lower levels have weak commitment, but the top is stronger, the system can still work by force. However, it is better if both the upper and the lower have the same commitment. (303, 2014)

We are facing a lot of problems. However, commitment is very important. Commitment has to be started from ourselves. Even if our leader has high commitment, but we do not, it will cause a conflict. For example, in our agency, our current leader has a commitment for discipline, but we still have another mindset. As an impact, there have been problems and conflict among us. It is not only at the staff level, but also at the middle management level. Actually, it was caused by his style in leading this agency being too hard. If we have commitment, we will not dispute the way of our leader in doing his job. (210, 2014)

Clearly, commitment is important; however, developing commitment is not easy. Some respondents propose that the development of commitment must be coerced by formal enforcement or formal regulation, as well as establishing a sense of the need for risk management:

Commitment can be begun by coercion. We enact a formal rule or regulation regarding the system implementation, and we include clauses regarding sanctions. This would allow us to obligate/enforce implementation of the system. In my opinion, the system will not be effective it is implemented without enforcement. (103, 2014)

> At early stages, the commitment has to be enforced. We can include the new system in regulation, for example, a regent regulation regarding expenditure. We should make the new system a part of the regulation execution and it will be mandatory, and later it will be implemented voluntarily. (202, 2014)

> All should be put in the form of written/formal rules. Furthermore, the rules need enforcement, needs a fair reward and punishment system in their implementation. There is a negative assumption in our bureaucracy, that "the good and bad man are the same, moreover the bad can get a better position". The assumption describes a weakness in Indonesia's bureaucracy that erodes motivation and commitment of the employee. Furthermore, we need a role model in the leader in local government. It comes back to commitment of the leader again. (103, 2014)

> For developing commitment, we need regulation from a higher authority, and to raise awareness that the system is our own best interests. In conclusion, in a system implementation, we need commitment from a higher authority, regulation and fostering a sense of need that the system will support our daily jobs. (203, 2014)

However, a strictly formal approach does not always ensure the development of commitment, and can often be a disincentive. Sometimes an informal and motivational approach is needed side by side with a formal approach, according to some respondents. The first quote below uses the language of "family and togetherness" to indicate a sense that this should be a shared or mutual endeavor. Both quotes, from middle echelon respondents, also indicate the importance of relationships between a leader and his or her staff for changing mindsets:

> Further, the more important thing is commitment for consistently carrying out the system. For developing commitment, we need formal and informal approaches. The formal approach can take the form of coercion by regulation equipped with a reward and punishment system. However, sometimes, a formal approach is not effective enough. We also need an informal approach. We develop close personal relationships with our staff, and develop a sense of family and togetherness. (206, 2014)

> Commitment is about changing mindset. Changing mindset cannot be done by formal instruction alone. Based on my experience, we have to have a close relationship with our staff. We should open a heart-to-heart communication to make a connection with our staff. The communication can be done with formal meetings or just informal chats. If we connect, it can be easier to ask our staff to do a job, and, at the same time, we change their mindset and build commitment. The other important thing is appreciation of their achievements. It will motivate them to do more. We should also not just ask

> them to change, but also demonstrate exemplary action. We must be role models. (210, 2014)

The other way to improve commitment is with provision of fair reward and appreciation. Rewards need not be only financial, but can also be nonfinancial, as noted by a respondent:

> The most important thing is commitment. With commitment someone will undertake his responsibility. Commitment can be developed by a kinship approach, for example, by visiting or sympathizing when he or his family is sick. It can be as a reward and as appreciation for him. It will impact positively on his job responsibility. Commitment also can be raised by giving rewards for employee's achievements. The reward may not need to be financial, but also may be non-financial. A thank-you note from a senior can have an amazing impact. In our culture, our thanks can be appreciation for our subordinate. However, financial and position rewards are also important. Promotion should be based on staff level and achievement, not by closeness to the boss or liking/disliking. So, we can develop commitment via a socio-cultural approach and a reward approach. If consistently implemented, it will be effective in developing commitment. (101, 2014)

As raised by the respondents, mandate and commitment are central issues for the implementation of a risk management system. Furthermore, strengthening the mandate and commitment can be undertaken by raising a sense of need, for example, the need of risk management for mitigating legal risk triggered by corruption or fraud risks, and the value of a system that reduces the level of fear and anxiety that staff may feel because risks are known and managed.

Establishing commitment at all levels is an important part of implementing risk management. However, there are different approaches for developing commitment of leaders and top management and for implementation at the staff level. As identified by the respondents, the commitment of top or executive management can be strengthened by external factors, such as the enforcement of regulation, and internal motives, such as needs. Because commitment of the top leader or management determines the subsequent processes of risk management implementation, this is an important prerequisite.

The development of commitment at the staff level is similar to that of the executive management, but staff commitment can be developed through both formal and informal approaches, as described by the respondents. Improvement of staff commitment should be conducted at every step of the implementation of the risk management system, because each step involves the staff. The commitment of staff will encourage a bottom-up approach to developing and implementing the risk management system. Staff should be aware that risk is not only a negative term, but also has a positive side. According to the ISO, uncertainty, as core aspect of risk, can lead to positive outcomes and opportunities. Engaging staff in thinking about what risk is (positive and negative) can establish a basis of commitment to risk management, and further integrate it into other aspects of their responsibilities so it is not an arduous addition.

9.2.2 Setting up an implementation committee

There currently exists a mechanism for establishing a mandate and commitment via the requirement of PP 60/2008 for the regent or mayor to implement risk management at local government, agency, and activity levels. There is scope for this regulation to also mandate provision of budget allocation and other needed resources, and the establishment of a committee for risk management implementation. The latter as proposed by Preda (2013).

Following Preda's suggestion, the committee can be responsible for designing the framework for managing risk, which involves creating an implementation plan and developing risk management documents (Preda, 2013). This would introduce a practical mechanism for what Preda states is a complex process, especially for Indonesian local government. Indonesian local governments are large and multifaceted organizations. According to Government Regulation Number 41/2007 regarding the organization of regional government, a local government can involve many levels and functions: secretariat, secretariat of local parliament, agencies, technical agencies, audit office, planning agency, subregency/city offices (called *kecamatan*), and sub-subregency/city office (called *kelurahan*). Agencies are institutions that carry out services based on the principles of autonomy and duty of assistance, such as education and public health services. A local government can have up to 18 agencies (Republic of Indonesia, 2007a).

Technical agencies are supportive institutions responsible to the regent or mayor for specific duties, such as public libraries and local hospitals. A local government can have up to 12 technical agencies. A technical agency can manage an agency's technical implementation unit (called *Unit Pelaksana Teknis or UPT*).

Kecamatan is a working area of a *camat* (head of subregency/city), its duty is conducting partial services of local autonomy. A local government can supervise tens of *kecamatans*. A *kelurahan* is a working area of *lurah* (head of sub-subregency/city). Each *kecamatan* consists of a number of *kelurahans*. Each entity mentioned above also has its own organizational structure that involves various arrangements. There is also variation among local governments across Indonesia reflecting their historical development and the political dimensions of their local contexts. A typical organizational structure is summarized in Figure 9.1.

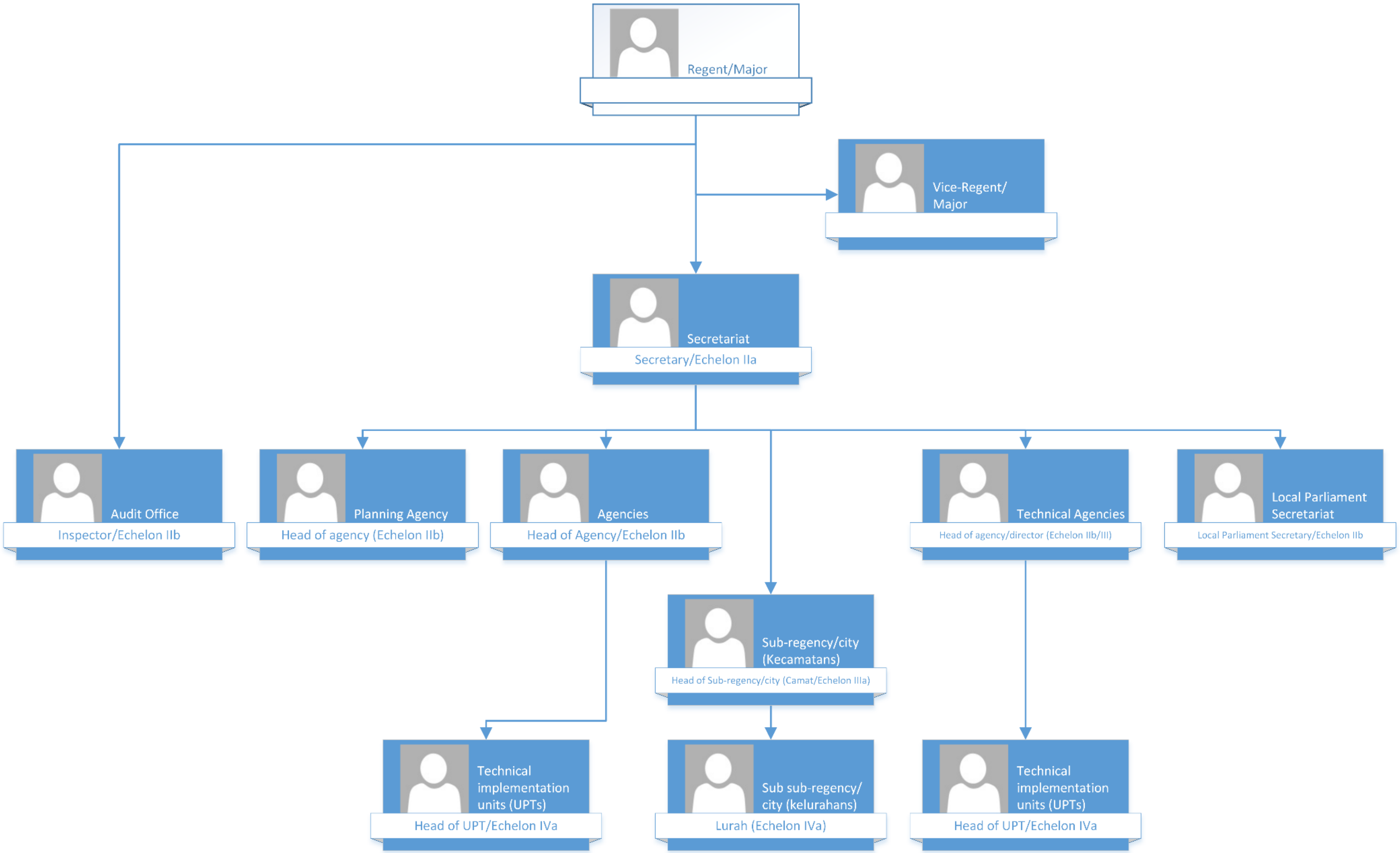

Figure 9.1: Typical Organizational Structure of an Indonesian Local Government

Source: Summarized from Government Regulation Number 41/2007

Figure 9.1 demonstrates *some* of the complexity of local government organizations. For example, a local government can manage hundreds of schools or tens of UPTs, and all of them are connected to the local government financial system. As was raised earlier, this is further complicated by relationships with other levels of central government and the changing public policy context. Uncertainty and change are key variables.

Considering this complexity, risk management should not be conducted by a single entity at the local government level, but is also needed at lower levels. A committee should be set up within every echelon II institution at least. According to Ministry of Internal Affairs Regulation Number 59/2007 regarding guidance for regional financial management, and number 54/2010 regarding regional planning, echelon II institutions carry out almost all of the cycles of local government finance, from planning activities through to accountability activities. However, this rule of thumb should not be strictly applied, because there are many factors that affect the need for risk management, such as budget considerations and resource availability. However, the local government should establish committees at two levels at the least: local government level and agency (echelon II) level.

Following Preda (2013), at the local government level, the committee should be responsible for creating a risk management implementation plan for all local government entities, and developing risk management documentation such as guidance for implementing risk management processes at the local government level. At the agency level, the committee should prepare an implementation plan for the agency, and develop guidance for implementing risk management processes. At the agency level, the guidance can take the form of standard operating procedures. Because risk management needs strong commitment from top management, at the local government level it should be under the supervision of the secretary, as the highest bureaucratic position holder in local government. Further, at the agency level, the head of agency should be the responsible person. However, in operation, the committee should be managed by personnel who have enough knowledge of organizational processes and have good verbal and written communication skills (Preda, 2013). Following the ISO, this is the initial step that should be prepared in the design of a framework, for the reason that it a person or group of people should have responsibility for designing the process of framework implementation. However, the ISO's recommendations are adopted here with consideration of the organizational structure of Indonesian local government.

9.2.3 Designing the framework for managing risk

In line with discussion on the committee, the process of implementing risk management should involve processes at both the local government and agency levels. Both levels will have similar processes with the main difference being one of scope.

As previously discussed, what is being proposed is a framework to implement and integrate risk management processes into an organization. It can be derived from Preda's steps of risk implementation, that there are two main activities in implementing a risk management process: creating an implementation plan and supporting activities by providing needed resources, and developing risk management documentation as guidance for implementing risk management processes.

9.2.3.1 Establishing Implementation plan and supporting activities

9.2.3.1.1 Creating an implementation plan

I have suggested that risk management processes need to be carried out at different levels within an organization; this applies also to the development of collaborative implementation plans between local government and agency level committees. Cooperation is needed in order to design comprehensive plans that involve activities or steps in implementing risk management for all agencies and providing related resources. Teamwork is also needed for formulating risk management guidelines for the local government level and general guidance for all agencies. Involving all components of local government in designing an implementation plan is in line with an idea from a respondent:

> Developing a new system should be done together to reach mutual agreement amongst ourselves, and, more important, for building commitment. Further, the system should be formalized with decrees or regulations or other forms. Then the regulation/rule of the game should be presented to all personnel as a starting point for implementation. During implementation, we need to review the system and improve it. (304, 2014)

The other important thing that should be considered in designing an implementation plan is the costs and benefits of the system, or, as Preda stated, that the system should demonstrate the added value for daily work (Preda, 2013). This was supported by a respondent:

> A risk management system should consider its costs and benefits, for example, I think that we do not need a complex system for controlling a financial transaction with a small value. (108, 2014)

9.2.3.1.2 Formalizing the implementation plan

Because the implementation plan is guidance for implementing risk management in all agencies, it needs an adequate mandate. Therefore, it needs to be formalized with regulations such as a regent or mayor's regulation or decree, as stated by a respondent:

> A new system has to have enough mandate for its implementation. It also has procedures that run consistently. The new system should be standardized across agencies in our local government. Therefore, wherever we will be moved, it will not be a problem. If it is not standardized, we need time to learn each system as we are moved. (105, 2014)

9.2.3.1.3 Providing resources

As suggested in ISO 31000:2009, local governments should allocate resources for implementing risk management (ISO, 2009). Though risk management should be an integral part of local government processes and activities, there are implementation activities that need funding, such as training and activities to develop awareness of risk management. To access funding, risk management implementation activities should be included in local government planning and budgeting processes.

9.2.3.1.4 Organizing awareness activities

An important part of implementing risk management is awareness of the people who will implement it on a day-to-day basis. This includes awareness that risk management is important, that it provides added value, and that it is needed. This awareness will further develop commitment to adopting the system. Therefore, organizing awareness is an important step in implementing risk management. Some respondents also recognized that readiness and awareness are needed:

> The first important thing is identification that the system is needed. (202, 2014)

> For implementing a new system, such as risk management, we should prepare our human resources. We should prepare their readiness and awareness for a new system. (310, 2014)

An early step, before implementing the system, is providing briefings to the personnel and giving guidance aligned with the SOPs. They have to know the new rules of the game. (105, 2014)

And the most important thing for making the system run effectively and continuously is awareness that the system is needed. For example, the system can be used as backup in legal cases if there are problems in our jobs. Therefore, we become aware that the system is important, and we need it. Based on this awareness, we will continue to apply the system, even if we are not supervised. Because we believe that the system is "the soul" in carrying out activities. (111, 2014)

Awareness of the system can be developed through the provision of information about the system via training, as mentioned earlier, or other forums such as workshops and meetings organized by the implementation committee, as proposed by a respondent:

Further, all of us (echelons and staff) should be aware of and understand the system. We should provide enough information. We can initiate workshops, meetings, training or other media for delivering the information about the system. (310, 2014)

9.2.3.1.5 Providing training and technical support

In the local government context, the implementation plan is a plan for providing enough resources to implement the risk management process. According to ISO 31000:2009, the resources that should be considered involve:

a. people, skills, experience and competence;
b. resources needed for each step of the risk management process;
c. the organization's processes, methods and tools to be used for managing risk;
d. documented processes and procedures;
e. information and knowledge management systems; and
f. training programs (ISO, 2009, p. 11).

The need for resources to implement a risk management system was also raised by some respondents:

In establishing a new system, we need proper placement of personnel. We need the right man in the right place. We also need supporting systems, especially use of information technology. And the most important thing is commitment and command of our top management. (109, 2014)

> Before we implement a system, the first thing we need is commitment, especially from top management. Secondly, preparing human resources who will implement the system, and further the system itself. The commitment should be realized in the form of regulation. It should be detailed in the processes and procedures of the system and who will be responsible for the processes and procedures. (308, 2014)

> Before implementing a system, we need to prepare our human resources because it is a basic thing in implementing a system. (206, 2014)

> In implementing a new system, we need a prerequisite relating to human resources: adequacy and capability of personnel who will adopt the system. (305, 2014)

All the above respondents agree that preparing human resources is imperative to implementing risk management, as the system will be implemented by people, and their attitudes and psychology will impact the implementation (Preda, 2013). Therefore, training is needed in this step. Training should not only seek to upgrade knowledge and skills, but also contribute to organizational changes necessary for implementing the system, as stated by a respondent:

> We should reform our organization, ourselves, our human resources. Learning is a never-ending process. There is always something new. Our regulations always follow our current challenge. We have to adapt to every change. If we do not, we will be excluded. (202, 2014)

Therefore, training and technical support should exist within the process. The committees, at all levels, should provide assistance in the implementation. The training should be provided at all levels of local government management. Its focus should be on providing an understanding of the concept of risk and the need to manage it.

Risk management efforts need knowledge and skills that may not always be available in local governments. Involving the local government audit office is an option, though this will impact independent review later in the process (Crawford & Stein, 2004). Training is another option. A respondent suggested that:

> For implementing the system, we need training and its strategy. We also need assistance from our local auditors as internal consultants. They should supervise and evaluate our process. If the understanding of our personnel regarding risk management is still not enough, we should improve their ability with organized training. (202, 2014)

Another option is using external consultants from central government institutions, such as BPKP (internal auditor of central government). As stated in Clause 59 of PP 60/2008, one of BPKP's roles is providing training and consultation for implementation of SPIP. Implementation plan and supporting activities can be summarized in Figure 9.2.

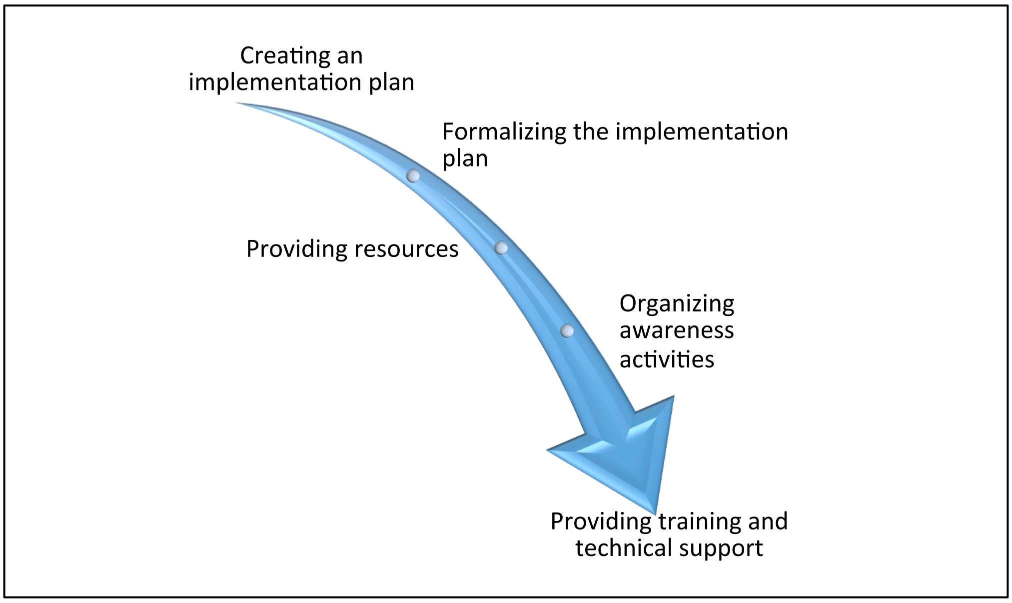

Figure 9.2: Establishing Implementation Plan and Supporting Activities

9.2.3.2 Developing risk management documentation (SOP)

9.2.3.2.1 Developing standard operating procedures

After developing the implementation plan, guidance for implementing the risk management processes is needed. As discussed in the previous chapter, there are similarities between ISO 31000:2009 and PP 60/2008 in regard to managing risk, but there are also differences. As discussed previously, PP 60/2008 does not provide guidance for implementing a risk management process into government institutional processes. Therefore, clear guidance is needed for this purpose. The guidance can be standard operating procedures, as proposed by a respondent:

> Then we need detailed guidance for the system. It can be SOPs that integrates risk management into each of our activities. The SOPs should be detailed enough to describe the steps of the system from the beginning until the end. The SOPs also should determine the time range of each step of the activity and the overall timeline. (310, 2014)

Establishing SOPs provides benefits for implementing risk management. Clearly, SOPs provide clear guidance and standards for implementing the system. SOPs can also provide evidence of the accountability and responsibility of various roles, because they describe what, who, when, and how a job should be applied, as identified by respondents:

> The important aspect of the system is as clear guidance in implementation. The SOPs are also needed for standardizing activities of risk control. For example, the field supervisor's checklist, we should have guidance that can give direction for the field supervisor in implementation: the responsibility, the action, the time of the action, and so on. (111, 2014)

> In implementing a system, we need a standard as guidance for the formal regulation. We should have a well running process, and alignment of all stakeholders, including bureaucracy and local parliament. Because local parliament has political power, the alignment will eliminate disturbance of the system. (214, 2014)

> With an SOP we will have clear guidance. Responsibility, accountability, what we will do, who will do it, how long we will do it, and how we will do it, all should be clearly specified in our SOP. Before I thought that an SOP was not urgent for us and it has not yet been a priority for our agency. However, based on our discussion with some prosecutors, they said that we should have an SOP. By this, if there is a mistake or a legal case, we can clearly identify and trace who is the person in charge, who will be responsible and in which level. All will be clear if we have an SOP. Further, we need to have job descriptions for each personnel. We have to identify what is the job, who will do it, how long it takes to complete the job, what is the output, who will process the output, and so on. For making it clear, we can use flowcharting. It will describe the jobs, the flow, and if there is an obstacle, we will know where it happens and who will be responsible. And the SOP should be formalized in a regulation. Based on the SOP, all of us will understand our own jobs, the objectives, and we should be able to optimize our work time and eliminate time wastage. We will do our job without waiting for instruction anymore, for the reason that all jobs will be clearly determined in the job description. (306, 2014)

For achieving such benefits, an SOP should demonstrate characteristics that reflect users' needs. Considering the weakness of local government human resources, an SOP should be simple but sufficiently detailed. An SOP also should be derived from the existing system, as identified by respondents:

> In my opinion, a system should be simple and make our jobs easier and quicker. (303,

2014)

We need a system that is simple and efficient. (102, 2014)

Considering the quality of our personnel, in implementing risk management, we need practical guidance and a simple tool. For example, in implementing a contract of a physical project, sometimes our supervisors are reluctant to read technical specifications that are required by the contract because of limitations in their capability. This will raise a risk of substandard project quality. Therefore, they need guidance for carrying out their job, such as the steps and the technical requirements. It can be a simple checklist of the steps and their results or conclusion. We just need a simple tool that aligns with the capability of our personnel. (111, 2014)

In my opinion we need a detailed SOP for guiding all of the system implementation. (212, 2014)

The system will be effective if it is developed via a bottom-up approach, and derived from the effective existing system. It should not be forced from the top. Risk management systems can adopt the existing risk control system with regard to its strengths and weaknesses. (101, 2014)

For smooth implementation, an SOP should contain enough detail to ensure that it is implemented, and that it reflects the needs of the people and the organization, as stated by respondents:

We need a formal SOP as guidance for implementation of the system. (206, 2014)

The process of implementing a risk management system needs the mandate of a certain authority. It can be a formal rule, for example, a regulation enacted by the head of agency. However, in developing the system and building the risk management tool we should involve the users who know exactly what they do and what they need. We also need to inform and involve all levels of personnel in implementing the system. (305, 2014)

. . . And the SOP should be formalized in a regulation. Based on the SOP, all of us will understand our own jobs, the objectives, and we should be able to optimize our work time and eliminate time wastage. We will do our job without waiting for instruction anymore, because all jobs will be clearly determined in the job description. (306, 2014)

9.2.3.2.2 Publishing and advertising documentation and receiving feedback

Before a formalized SOP is stipulated, it should be published and introduced to the people who will be affected by it. This is to allow people to familiarize themselves with the SOP, and, importantly, to allow them to provide feedback. Because the SOP is operational guidance for risk management, it is necessary that it should fit with the daily processes of the government institution. Seeking feedback provides an opportunity to ensure that the SOPs are improved to ensure their relevance. The feedback process also develops a sense of belonging and consensus on an SOP, and this will improve its implementation. Respondents described the importance of publishing and gaining feedback:

> A new system should be a consensus and formal rules. The rules should be simple but effective. It can be represented in standard operating procedures (SOPs). The SOPs need feedback from all agency components in order to develop a sense of belonging. The SOP should be a real form of consensus. Afterwards, it should be enacted by formal rule/regulation, such as by head of agency decree/regulation. Further, we need briefings/workshops/training for internalizing the SOP. (104, 2014)

> Further, it will be better if we ask their participation in formulating the tool or guidance based on their field experience and daily jobs. The guidance and tool should be a bottom-up process, and based on our staffs' needs in carrying out their jobs. In other words, the tool and guidance should be developed by our personnel for gaining their understanding and a sense of belonging. Efforts in developing the guidance or tools for risk management should also invite other sections and other sub-agencies, so that we have a standard for the overall agency. (111, 2014)

> After developing the SOP, we need to inform the SOP to all levels of our personnel who will implement it. We also provide information about consequences if they do not carry out jobs based on the SOP. The job will be hampered, and it can result in administrative and legal consequences. It would be part of a reward and punishment system. The system will also measure their performance. (306, 2014)

9.2.3.2.3 Aligning the process to the organization's processes

As discussed in Chapter 7, conducting risk management through a separate activity, such as a workshop, is a weakness in current local government practice. It is not a sustainable activity. Involving people in designing the risk management process and its tools is a way of ensuring that the risk management system fits with other organizational systems, as exemplified by two respondents:

> A new system has to have enough mandate for its implementation. It also has procedures that run consistently. The new system should be standardized across agencies in our local government. Therefore, wherever we will be moved, it will not

be a problem. If it is not standardized, we need time to learn each system as we move. Furthermore, the system should assist our jobs, and not give us additional jobs. The system also should be simple enough and represent all of us. More important is that we have to make it balances according to our needs: standardizing the system, the system assists our jobs (as clear guidance), the system is simple enough and representative of our own job (integrated). We have experience, as an example. At one time, we wanted to develop a supervision system for a physical project. We asked field supervisors regarding the sequences of their procedures in supervising a physical project. Based on consensus among the supervisors, we arranged a checklist. The first consensus was for the section level, then the sub-agency level, the agency level and finally the local government level. Even if each agency has a different job description, they have similarity in certain aspects, for example in supervising physical projects. (105, 2014)

Further the system needs guidance for making it run smoothly. In this case, we need an SOP that gives us standard guidance. Developing an SOP should involve all levels of personnel, including the lowest level, so that the SOP can represent real practices and can be implemented. (301, 2014)

Another approach for integrating risk management with organizational processes is by making it fulfill the needs of the organization and/or the people in the organization, using a bottom-up approach in developing risk management documentation, as described by the respondents below:

In my opinion, in planning documentation of each activity, we should attach operational plans that involve business processes, budget execution documents, and risk management documents (a risk analysis and its action plan). The risk management document may consist of one, two or three pages, but the risk management should be simple and easily implemented, so that it will not be just an attachment included as a formality. Therefore, the risk management system should support our needs, be simple, and be easy to implement and not be an additional burden for us. (204, 2012)

In implementing a new risk management system we have to consider not only making it formal but also integrating it with local government's existing systems. For making it formal, I think it has been done. We have the regent/mayor regulation and taskforce. Making it integrated is more challenging. Objectives of a local government are represented in agencies' programs and activities. The implementation of a new system can be represented in developing a risk-based SOP, and implementing it. We can start from the activity level. We develop an SOP for activities in an agency. Combinations and summaries of the activity level SOPs will be the agency level SOP, and so on, until the local government level. By this, we will integrate a new risk management system into local government management. (401, 2014)

At the local government level, this step can be undertaken by involving the agency committee, comprising representatives of agencies, in creating the implementation plan and developing SOPs. Further, at the agency level it can be carried out by involving people in those activities.

9.2.3.2.4 Getting management approval for all documents

After eliciting and responding to feedback, SOPs should be formalized in order to become mandates for implementation. Considering the structure of local government, SOPs for risk management process implementation will address a number of levels: local government, agency, and activity levels. An SOP for local government should be developed by the local government committee and can be enacted with regent/mayor regulation or decree. An SOP for an agency should be developed by the agency committee and can be enacted by a head of agency regulation or decree. The need to formalize an SOP is raised by respondents:

> We need an SOP as guidance that is obligated by certain regulation, such as a mayor regulation or head of agency regulation. (312, 2014)

> We need the system to be a formal rule of the game, such as an SOP. An SOP will be enacted by a decree of the head of agency. The SOP should cover processes and actions of the system, and its implementation as well. For example, in the implementation we can use a form, as the embodiment of our existing control, that involves points, such as identified risk, its impact, the controls, the actions, and control effectiveness. The formal decree of the head of agency and the process embodying our current risk control processes, should assist the implementation of a formal and integrated risk management system, because it will capture what we do in our daily jobs with regard to controls on risks. A framework of a risk management system implementation can be carried out by decree of agency head (including enactment of SOPs and its supporting forms that are proposed by each part of the agency), developing commitment simultaneously, implementing the system integrated with our existing daily system, and reviewing the system periodically for adopting changes and innovations, and solves the obstacles for running effectively. (101, 2014)

> . . . Furthermore, we also need a top-down process. The standard will not be effective without appointment of the top management, at least the head of agency. It will be better/effective if it is enacted with a head of agency decree. It considers our culture,

feudalism. We need direct instruction from the top in implementing a system. (111, 2014)

The process of developing an SOP is summarized in Figure 9.3.

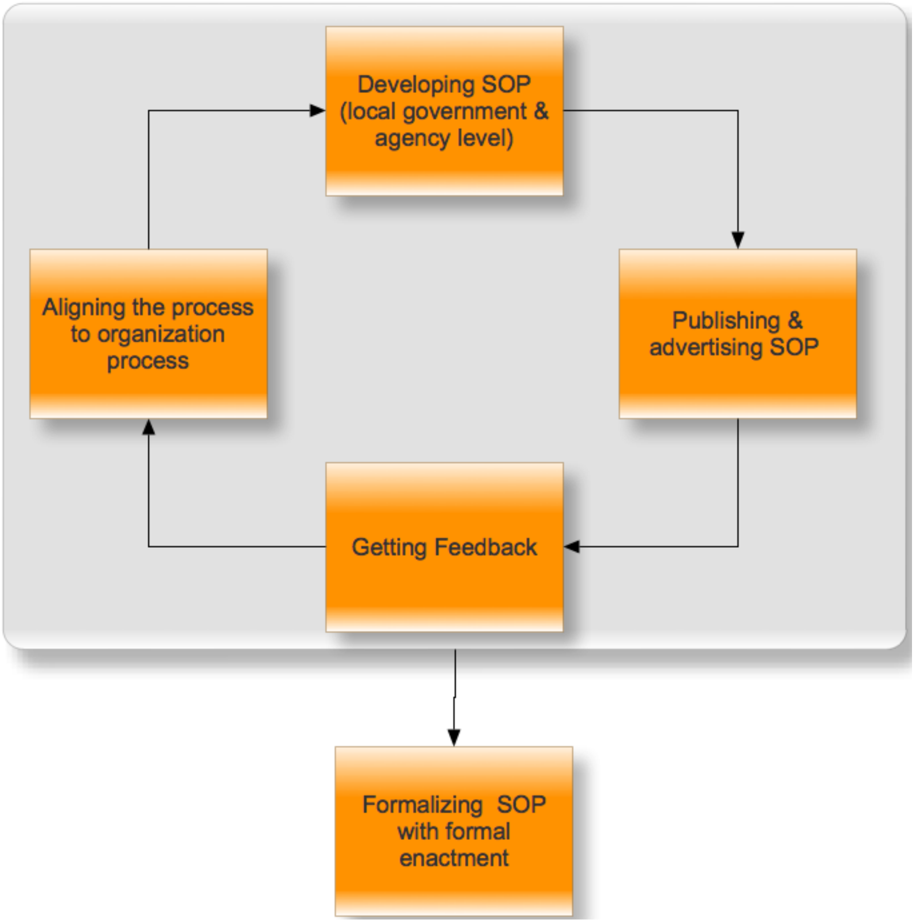

Figure 9.3: The Process of Developing Standard Operating Procedures

9.2.4 Implementing risk management process

In the context of local government, risk management processes must be integrated into government institutions' activities and processes at all levels, as exemplified by one respondent:

> In implementing a risk management system, first of all we have to establish the system at all levels, down to the activity or technical level. We have to provide clear guidance. For example, in assigning a field supervisor, we should not only give him his new job, but also give him a description of his job and tools/forms for guiding him in conducting his job (i.e. checklist of jobs that he should do, form risk assessment relating his job), including guidance for reporting. It is a kind of control on risk, especially risk relating to physical projects. It is a way for integrating a risk

management system into our current system (project supervising system). It also assists the supervisor in carrying out his daily job, without bothering him with a new burden/job. So, the new system should help the people, not overburden them. Therefore, the system should be detailed enough to be used as guidance. (103, 2014)

Ways to integrate risk management processes and tools for managing risk should be arranged via SOPs, as previously discussed. However, further steps are needed in order to apply SOPs to daily activities. Some respondents, as quoted below, propose that SOPs should be communicated to people, then consensus established with regard to rewards and punishments in relation to system implementation. The system can be implemented gradually, for example by using pilot activities, as the scope of system implementation in local government can be huge. For early steps, enforcement may be needed:

> In my opinion, we need steps for implementing a new system. Firstly, we communicate the new system to all personnel, so that they are aware of and understand the new system. Secondly, we have agreement on rewards and punishments relating to the new system's implementation. For example, those who obey or disobey the new system have their names placed on the notice board. Thirdly, we should implement the system gradually. We start with the most risky projects or activities. For example, we have hundreds of activities. We choose five activities at the beginning. After that, we can increase the number of activities to ten, twenty and so on. (111, 2014)

> Further, the most important and first thing is standard operating procedures (SOP). The SOP will arrange that each activity should provide the required documents, including risk management documents. The SOP should be enacted with a formal regulation. The regulation can enforce all of us to implement risk management. For example, in the regulation, we can include clauses that if the risk management document is not attached, we will delay payment in advance for an activity. For early steps, we have to push or force the implementation. Later, it will be a habit. We want to change the current mindset to embed risk management as a necessity of a responsible person within an activity. We can implement the new system gradually. We can begin the implementation with our main office. Further we can continue with our technical implementation units (Unit Pelaksana Teknis or UPT), and our schools. We can involve personnel from the main office to assist in the implementation in UPT and schools. Really it is a huge job, because we have very broad span of control. We, in the Education Service Agency, have one main office, 18 UPT, 600 asset management units (Unit Pengelola Barang or UPB) and about 1060 schools that are

spread across our regency's area. . . . . Therefore, the risk management tools should be designed aligning with their needs and understanding. It is impossible to make the same tools for each of them, for the reason that they have their own specific activities. Summing up, raising the understanding and changing the mindset are at the core of risk management implementation. (204, 2014)

This last quote states that the implementation of a new system also requires a change of mindset. Changing mindsets needs concurrent efforts using formal, informal, and cultural approaches, as described by the respondents below:

> Implementing a risk management system is also about changing mindset. Changing mindset can be done with effort such as implementation of a reward and punishment system, informal or personal approaches, by example, and cultural approaches that align with our own local culture. Cultural approaches are important in implementing a system. We have our own culture. (205, 2014)

> In improving system implementation we need regulation enforcement. However, the enforcement should not just rely on formal approaches. Sometimes we apply informal approaches, and it is more effective, though sometimes it is not efficient. Considering our culture, we should be nice and use a wise approach in implementing the new system, and they will more readily accept the system (208, 2014)

> Informal approaches are needed in solving important issues in the system, because sometimes it will not be effective if we only rely on formal approaches. A system will be influenced by the ways and styles of the cultures. (214, 2014)

> Implementing a system is about changing mindset. Sometimes it is not easy to change. Therefore, we need to force the change, and, if necessary we need punishment. Sometimes we need to force people to implement a system. Initially they are forced, then they do it even if they are not forced, and ultimately they do it as a habit. (303, 2014)

The above discussion is in line with Preda's (2013) description of risk management implementation. Risk management is implemented by humans and is therefore affected by attitudes, behaviors, and cultures (Preda, 2013). Furthermore, a respondent suggested that the role of middle or lower management, such as the head of a subagency, is important in leading risk management implementation. Coordination between components should be considered to avoid overlap in implementation:

> Further, in implementing the system, the heads of sub-agencies will be responsible in

general. They will direct their staff on what they should do. They will transform the SOP into practical actions. The important aspect of the system implementation is coordination. We need coordination between sections, and between divisions to avoid overlap of the implementation. Relating to implementing a formal and integrated risk management system, we also should consider adoption of information technology into risk management processes. (306, 2014)

Implementation of the SOP should not be a static process. As a part of the risk management framework, it is subject to a process of review and improvement. The process of SOP implementation, including review and improvement stages, is a cycle is summarized in Figure 9.4.

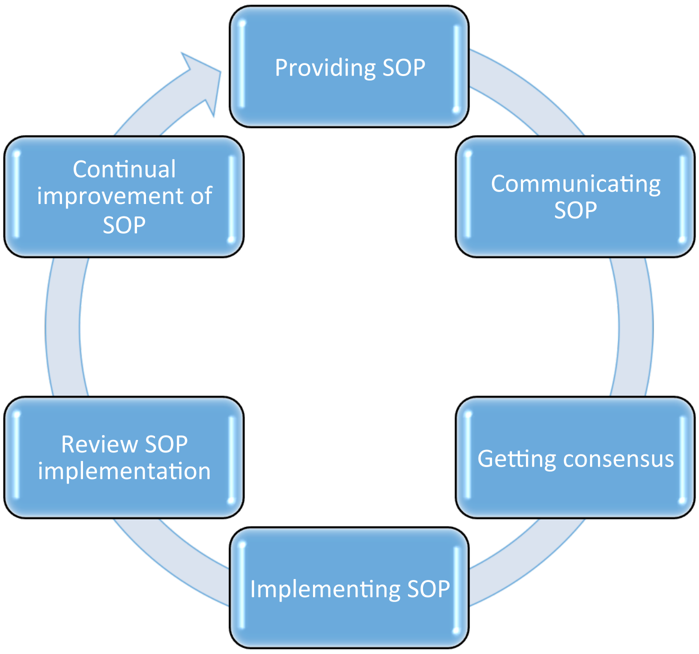

Figure 9.4: Process of SOP Implementation

9.2.5 Monitoring and review of the framework

Monitoring and review of the framework is an important follow up to the implementation process. It is needed to ensure that risk management remains effective and supports organizational performance and objectives. PP 60/2008 suggests monitoring and review processes such as continual monitoring, separated evaluation, and following up on audit results. Continual monitoring is an internal process by management. This review can be carried out by each committee, and is based on the implementation plan and the SOP. Separated evaluation, in a local government context, can be conducted by the local audit office, though its independence may be questioned if it was involved in the process of designing and implementing the system, as identified by Crawford and Stein in their (2004) study. The third type of review process is the audit undertaken by an external auditor. In conducting its audit of local government finance, the auditor should review the effectiveness of internal controls relating to risk assessment (BPK-RI, 2007). The audit result can be a source for reviewing the risk management process that, in the context of regulation, is a part of government internal control.

The need to review the risk management framework and its objectives was raised by respondents. Respondents proposed yearly reviews by management:

> During the implementation, we should evaluate the system. The difficulties, the obstacles, and the new ideas are the feedback for reviewing and improving the system. And, the most important, implementation and operation of the system should be properly documented. (105, 2014)

> In my opinion we need a detailed SOP for guiding the entire system implementation. Further, we need to communicate the SOP to all of our staff. We also need to review the SOP and evaluate the implementation. So for implementing a system we need guidance/SOP, mandate, and continuous review for making sure that the SOP is completely implemented. If we ignore it, it will influence the quality of the system and the objectives will not be achieved. (212, 2014)

> We also need a periodic system review to indicate weaknesses of the system and find out the system obstacles. (103, 2014)

> When implementing a new system, we should evaluate the implementation, the readiness and capability of our personnel, the weaknesses, the obstacles, and the needed changes. We also should collect information from each section of the agency regarding the new system implementation and the bottom-up process of the system. With the information, we can identify modifications that are needed in implementing the system. We should review the implementation of the system yearly based on the SOP, for assessing the effectiveness of the system. For reviewing the system, we need somebody who understands the system and, at the same time, also understands the technical job. Therefore, in my opinion, a lower manager (head of section) is the most suitable person. Head of section should understand the technical matters of the job, and he/she has enough understanding on conceptual parts of the system. (111, 2014)

9.2.6 Continual improvement of the framework

One process not mentioned by Preda (2013) in his steps for risk management implementation is continual improvement of the framework. Based on the methods of monitoring and review previously discussed, local government should identify parts of the risk management process presented in the SOP that need improvement. According to the ISO, this will improve the organization's management of risk and its risk management culture (ISO, 2009).

The framework for implementing risk management in Indonesian local government is summarized in Figure 9.5.

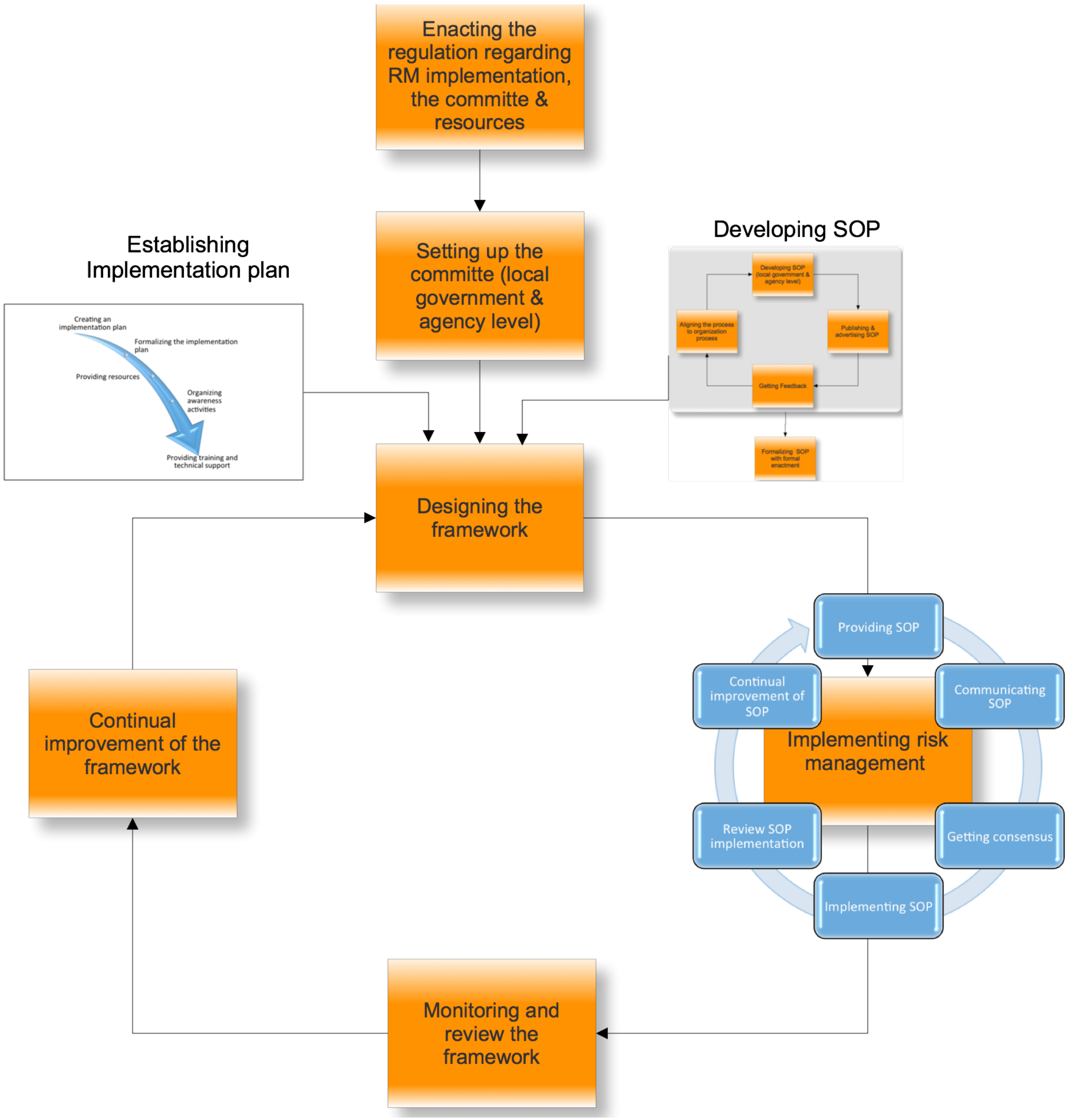

Figure 9.5: Risk Management Framework for Indonesian Local Government

As discussed previously, absence of a framework is one of the obstacles for an effective risk management implementation in Indonesia local government. Therefore, it is contended that this proposed framework should fulfil the need. However, any implementation of such a framework in Indonesia local government is a process of public policy that involves local government itself and central government. A framework implementation needs a mandate through regulation enactment. In substance, PP 60/2008 regarding government internal control system, the only regulation for managing risk in local government, regulates processes of risk management (involving risk identification, risk analysis and risk controlling), but does not direct how to implement risk management. Therefore, it is necessary to amend PP 60/2008. Further, according to Presidential Regulation number 11/2015, Ministry of Internal Affairs (MoIA) has authority in arranging, enacting, and implementing a policy regarding local government autonomy, development and finance (Republic of Indonesia, 2015). This is a possible mechanism whereby the MoIA could establish a regulation for implementing a risk management framework.

However this is not a straight-forward process since risk management is a new area in Indonesia public sector, and MoIA's officers may not aware of this matter. Awareness raising about risk management in the Indonesia public sector, especially in local government, it is a necessary step.

9.3 Conclusion

As discussed in the previous chapter, there are two approaches currently used to manage risk in Indonesian local government: reaction to individual problems and implementation of SPIP. Currently, both of these approaches suffer from weaknesses that impact their effectiveness. SPIP, as an available formal system for managing risk, is still in the early stages of implementation. The lack of an effective formal system indicated the need for a formal integrated risk management framework that is in line with international standards and Indonesia's specific local government circumstances. A comparison between ISO 31000:2009 and PP 60/2008 demonstrated similarities, and showed that both could be used side by side as guidance for developing a risk management framework. However, PP 60/2008 does not explicitly describe a process for implementing risk management processes into local government finance. To covering this shortfall, Preda's (2013) work, regarding the steps for implementing the standard, has been used as a reference.

The framework proposed for implementing risk management in local government refers to ISO's risk management framework modified by the requirements of PP 60/2008, Preda's steps in implementing the standard, and the needs of local government based on results of the current study. The proposed framework involves steps for implementing risk management in local government, such as enacting regulation as a basic mandate, setting up risk management implementation committees in local government and agencies, designing the framework to produce an implementation plan and SOPs for implementing risk management processes, implementing the framework, monitoring and review of the framework, and continual improvement of the framework.

CHAPTER 10 : CONCLUSION

> Key institutions of modernity such as science, business and politics, which are supposed to guarantee rationality and security, find themselves confronted by situations in which their apparatus no longer has a purchase and the fundamental principles of modernity no longer automatically hold good. Indeed, the perception of their rating changes, from trustee to suspect. They are no longer seen only as instruments of risk management, but also as a source of risk . . . The basic institutions, the actors of first modernity: science and expert systems, the state, commerce and the international system, including the military, responsible for calculating and controlling manufactured uncertainties, are undermined by growing awareness that they are inefficient, their actions even counter-productive. This does not happen haphazardly, but systematically. Radicalization of modernity produces this fundamental irony of risk: science, the state and the military are becoming part of the problem they are supposed to solve (Beck, 2006, pp. 336, 338)

10.1 Introduction

As discussed in Chapter 1, in a relatively short period, Indonesia has changed from being the most centralized county in the world into the most decentralized. This thesis has described how this transformation has brought about changes to local government's role in administering their areas of responsibility and delivering services. Decentralization has assigned more responsibilities and transferred more funding to local government. This has been accompanied by a more complex service delivery system that is required to comply with local autonomy regulations. All of the above has led to complexity in local government financial systems. The transformations and their effect on complexity have resulted in local government facing more risk events and weaknesses in their financial management. As risk becomes a more frequent occurrence in the everyday workings of local government, so has the need for an understanding of risk and its management become more apparent.

Although an understanding of risk and risk management in the public sector is needed in post-decentralization Indonesian local government, there is a paucity of risk and risk management literature from an Asian perspective (B. M. Hutter, 2010). Furthermore, risk management and regulatory systems are underdeveloped in the literature addressing Asia, and the concept of risk is less popular among social and public policy analysts even in relatively developed East Asian societies (Chan et al., 2010). This thesis contributes to the understanding of risk and risk management from another Asian perspective: that of a developing country. Indonesia has very different circumstances compared to Western countries, from which the idea of risk and risk management originate. The aim of the study was to explore risk in post-decentralization Indonesian local government. The study also investigated the efforts of local government to dealing with risk in order to achieve its objectives. Further, it provides a framework for implementing formal integrated risk management in Indonesia.

Summing up the discussion of the previous chapters, the current chapter consists of four sections. The first section concludes the findings of the study with regard to risks that appear in contemporary Indonesian local government and efforts to deal with them. The second section describes the contributions of the current study to discussions of risk and risk management, especially from an Asian perspective. Further, this section also demonstrates contributions to the study of public governance, particularly for Indonesian local government. The third section identifies limitations of the current study. Based on these limitations, the fourth section describes areas that need deeper exploration as directions for future research.

10.2 Summary of Findings

This study has explored the risks that have appeared in post-decentralization Indonesian local government. To achieve this aim, three methods of data collection were used: a survey questionnaire, a self-risk assessment questionnaire, and in-depth case study interviews. There were similarities in the results from each of these data sources. They all showed that legal risk significant for local government. This risk is mainly related to corruption cases that may involve mayors, regents or local council officers. Because the possible impact of this risk is being sentenced to jail, there is a high level of fear among local government officers and, therefore, this risk was seen as significant by respondents.

Further, the self-risk assessment and the interview data highlighted that fraud risk, asset management related risks and human resource related risks are significant risks in local government finance. In many respects these are interconnected. Fraud risk is significant in a local government context as it relates to legal risks and can cause significant impact. Fraud is one case of legal risk. A study by Rinaldi, Purnomo, and Damayanti (2007) showed that 967 local parliament members and 61 regents and mayors faced were arrested as a result of fraud or corruption (Rinaldi et al., 2007). Further, fraud also influences processes of local government finance and the effectiveness of public spending as indicated by Suryadarma (Suryadarma, 2012). Fraud is also closely related to risk of political intervention.

As discussed, BPK's reports have identified that asset management is a problem in local government management and reporting (BPK-RI, 2015), a result confirmed in this study. Risks related to asset management are significant for local government in achieving its objectives. Loss of assets, improper recording, and incomplete asset documentation are some examples of asset related risks faced by Indonesian local governments.

Human resource related risks in Indonesian local government include frequent employee turnover, a shortage of employees and poorly skilled staff. These cause a lack of competent personnel to carry out council work. They also can trigger other risks, such as legal risk, fraud risk, delayed or low budget disbursement, and asset management related risks. This study has therefore shown that they are significant risks for Indonesian local government finance.

Further, the survey and interviews identified that political matters (change and intervention) present significant risks for local government finance. As detailed in Chapter 5, political intervention can affect the processes of local government finance. Together with fraud, political intervention can deteriorate processes of governance, as, according to autonomy regulations, political parties represented in local parliament have significant influence over local government finance. For example, local government budgets, including all projects and activities of local government, must be approved by local parliament. A summary of the risks identified by the study is presented in Table 10.1.

Table 10.1: Significant Risks to Indonesian Local Government as Identified by this Study

No	Survey	Self risk assessment (Extreme and Critical risks)	Case Study Interviews
1			Organizational changes
2			Fiscal risk
3			Delayed/low budget disbursement
4	Legal risk	Legal risks: Asset ownership Investment without supporting regulation Lack of understanding in procurement regulation that lead to corruption cases	Legal risk: Relating to corruption caused by inadequate competency in understanding/implementing regulation
5		Fraud risk: Theft and misuse of assets Manipulation of payments and/or deposit evidence Transaction is not recorded	Fraud risk: Manipulation of expenditure evidence Bribery
6		Asset management related risk: Loss of fixed assets Incomplete documentation of asset disposal Asset damage Loss of revenue from asset selling Loss of revenue from asset renting	Asset management related risk: Asset is not recorded Loss of asset Asset without proof of ownership

No	Survey	Self risk assessment (Extreme and Critical risks)	Case Study Interviews
7			Failure of planning system
8			Operational risk
10		Human resource related risk: • frequent employee turnover, • shortage of employee s • poorly skilled staff	Human resource related risk: • frequent employee turnover, • shortage of employee • poorly skilled staff
11	Political changes		Political and other intervention
12			Lack of resources/systems
13	Reputational risk		

Although exposure to risk has heightened in post-decentralization Indonesian local government, efforts to manage risk have been stagnant. This study has shown that more than half of respondents stated that their local governments did not conduct risk assessment as a part of their internal control system (SPIP). Further, in some local governments, implementation of the internal control system was still in its very early stages. Regulation obligates local government to implement SPIP in order to provide reasonable assurance of the achievement of objectives.

From the perspective of international standards, the study has also shown that although only half of respondents stated their local government applied formal risk management, these processes need further exploration. Compared with the requirements of the ISO standard for formal risk management, even those local governments that applied formal risk management demonstrated no component required by ISO standard is fulfilled completely by most of involved local governments. This impacts the effectiveness of local government in managing risk. The lack of a clear mandate, a lack of guidance, and a lack of commitment were identified by this study as causes of the weaknesses in implementation. This data reinforces the case for a more systematic approach to risk management in local government.

10.3 Contribution

As summed up in Chapter 2, there is paucity of studies on understandings of risk in Asia. Although studies of risk and risk management in East Asia have found similar results to those of their Western counterparts, the reality in Asia's developing countries has remained under explored. For example, there has been a lack of research about the state as source of risk, the kinds of risks triggered by weaknesses of the state itself, and the ways states in developing Asian countries have dealt with risk. Chapters 4, 5, 6, and 7 described risks and efforts to manage risks in the context of Indonesian local government. Post-decentralization Indonesian local government represents the lowest level of Indonesian government that has responsibility and authority to provide services directly to stakeholders. These chapters demonstrate that risks that exist in local government financial processes may affect the achievement of local council objectives. Considering the characteristics of the risks, their impact on local government objectives, and their influences on service delivery as core business of local government, this study's findings seem to support Beck's (2006) proposition that the state can be a source of risk.

Chapters 4 to 7 discuss risks in local government finance, and local government's efforts to manage them, in the context of Indonesia, a developing country. These chapters contribute to broader discussions of risk and risk management, especially regarding the nature of risk in a developing country, which may be different to that in developed countries, including those of the Western world and East Asia. Indonesian local government is still struggling with risks that may not be found in a developed country, such as human resource related risks, and risks of fraud and corruption. In Indonesian local government, human resources related risks, fraud and corruption risk are found to significantly influence achievement of objectives.

This study also contributes to discussions about public governance in Indonesia. An understanding of risk and its nature could support Indonesian local government and its stakeholders to analyze potential problems and risks that appear in local government finance, and prepare responses before risk events happen. Understanding risk is like holding a candle in the darkness to illuminate the steps toward the destination, in this context, the attainment of local government objectives. For example, as discussed in Chapter 1, many corruption cases involve the mayor or regent and members of local parliament. The problem has not been solved by imprisoning individual perpetrators, as the problems are institutional and systemic. This study has shown the existence of significant political intervention in local government financial management. Intervention can be motivated by a desire to recoup campaign funds disbursed to "buy votes" by a candidate during an election. Corruption can be understood by analyzing the risk of political intervention, fraud risk, and human resource related risks as described in Chapter 5. Furthermore, Chapters 7 and 8 have described in detail weaknesses and obstacles to implementing risk management in Indonesian local government. The identified weaknesses and obstacles are key considerations for improving efforts to managing risk, as improvement could decrease or eliminate them. Improvements to risk management systems can be expected to increase the likelihood of achieving objectives. Implementing a solid risk management system, through addressing weaknesses in the current system and obstacles to improvement, will improve public governance and provide reasonable assurance of the achievement of objectives.

The thesis has identified that the implementation of risk management in Indonesian local government has been hindered by a lack of guidance. The existing regulation does not specify clear steps or processes to implement risk management in the Indonesian public sector. Therefore, even though there is a regulation (PP 60/2008) that obligates local government to conduct risk assessment, some local governments have demonstrated that their implementation is still in the very early stages. Chapter 9 proposes a framework for implementing risk management in the Indonesian local government context. The framework was developed with consideration of existing regulations in Indonesia, international standard ISO 31000:2009, related literature, and the needs of and advice of local government officers. It establishes the importance of a mandate, leadership and processes. The framework provides guidance for implementing risk management in the specific context of Indonesian local government, in a manner that conforms to the international standard. Implementing a risk management framework also involves changing mindsets and the development of commitment, and is therefore influenced by cultural circumstances. In Asian culture, especially in Indonesia, formal approaches to changing mindset and developing commitment will not always succeed. In certain cultures, such as Indonesia's, informal approaches are needed. Developing and sharing a sense of family and togetherness has been identified as a strategy to support formal approaches to change mindset. This will also provide ease in the implementation of formal risk management processes.

10.4 Limitations of the Current Research

As described earlier, this research was focused on post-decentralization local government in Indonesia. All of the results demonstrate the conditions of local government after implementation of autonomy laws in 1999. The discussion of risk, efforts for dealing with risk, and sources of risk are based on post-decentralization environment. However, it is possible that some risks are a legacy from the pre-decentralized era, and that they could be understood as a continuation of old risks that have continued to exist in the decentralization era. This possibility could modify the proposition of the thesis that decentralization triggered particular risks in local government finance. It is possible that such risks actually already existed in the Indonesian public sector before the decentralization era. A longer term historical study would be needed to determine this. Such a proposition does lend credence to the need for systematic consideration of risks and how they are addressed.

Chapter 9 proposes a risk management framework for the Indonesian local government context. As mentioned above, one consideration in developing this framework was the needs of and advice of local government officers as obtained through interviews. Though this evidence was useful for developing the framework, it has a weakness that can be seen as a limitation of the research. The interviews demonstrate subjective opinions, based on interviewees' perceptions. At the time of the research this was the best approach available, because there were no local governments involved in the case study that completely implemented risk management. Therefore, there were no examples of comprehensive risk management practices in the local government context that could be referenced for developing the framework. Furthermore, the framework does not provide a detailed description of the risk management process. The absence of a complete implementation of formal risk management in local governments, and interviewees' lack of knowledge and understanding of risk management was a limitation of the information regarding risk management processes in the local government context. Again, this points to another area for future research, which is to study the local government contexts where there is best practice in financial risk management.

The research discusses of risk and risk management in the Indonesian local government context. The proposed framework was developed in reference to specific relevant local government regulations and local government needs. ISO 31000:2009 states that risk management should be tailored to the context, and this indicates a limitation of the research: the findings and the proposed framework may not be applicable outside the Indonesian local government context.

10.5 Recommendations for Future Research

Considering the limitations of the current research, there are some areas that need exploration in future research. This thesis focused on post-decentralization Indonesian local government. Exploration of risk and efforts to manage risk in the pre-decentralized era would provide a historical perspective on the risk and risk management in the Indonesian public sector. Such research may be able to develop an account of the background to the current regulation, current risks, and current efforts to manage risk. An understanding of risk evolution in the Indonesian public sector could inform the development of processes and efforts to manage risk. It would complement the findings and proposed framework presented in the current research.

Furthermore, there would be value in developing a greater understanding of risk management practices in Indonesia's central government. Local government and central government share the same regulations regarding managing risk (PP 60/2008). However, there is a possibility that there are different conditions between local and central government with regard to implementing the regulation. Analysis of central government practices in managing risk could be a valuable reference for local government. It could also be an additional practical study of the implementation of risk management in the Indonesian experience.

As stated, the results of the current research may only be applicable to Indonesian circumstances. To broaden the scope and validate the result of the current research in describing risk and risk management in an Asian developing country, future research would be needed to compare risk and risk management practices in the public sector of various countries in Asia, especially in areas other than East Asia. Therefore, a general understanding of Asian developing countries could be developed as a contribution to the discussion of risk and risk management. The current study provides a base for future research. This thesis has shown risks that appear in post-decentralization Indonesia local government and current efforts to deal with the risks. The study has also proposed a risk management framework based on Indonesia's particular circumstances and the international standard for risk management. The results of the current provide a starting point for exploring and discussing risk and risk management in similar environments.

APPENDIX A: PROCESS OF LOCAL GOVERNMENT FINANCE

Indonesia's local government financial management is a process that involves planning, executing, administering, reporting, controlling and accountability (Minister of Internal Affair, 2006). This is a cycle in which all the activities form a holistic management process. The output of a planning activity will become the input for next activities; the output of controlling and accountability activities will become the input or feedback for planning activities. This cycle is illustrated in Figure A.1 below.

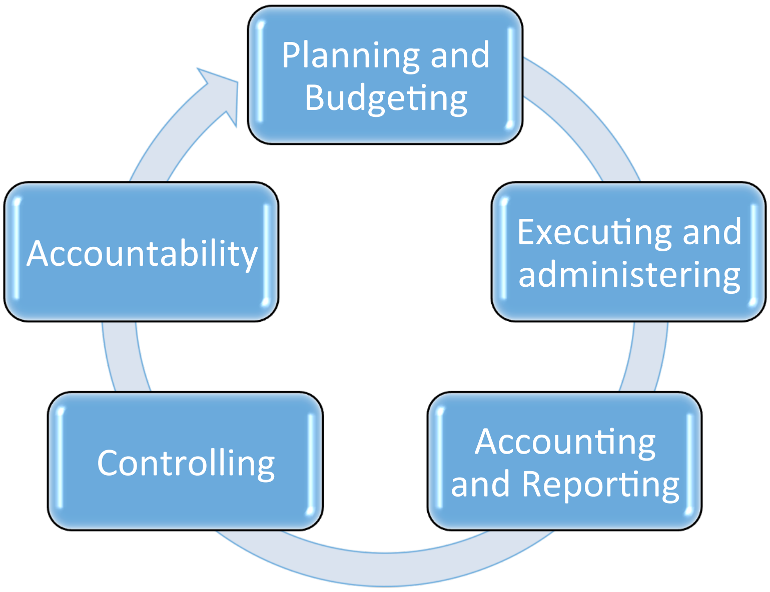

Figure A.1: Cycle of Local Government Finance

Source: Summarized from Ministry of Internal Affairs Regulation Number 13/2006

Detail descriptions of this process are provided below.

1. Planning and budgeting

The first step in the local government financial process consists of two interrelated activities: planning and budgeting. Planning precedes budgeting, and budgeting transforms a plan into activities and currency matters. Planning processes are set within the limits of the budget. The implementation of regional autonomy in enactment of Local Government Law Number 22/1999, and amended by Law Number 32/2004, has given a new dimension to governance in Indonesia. Regional autonomy has delivered more rights, powers, and obligations to local governments to regulate and manage their own affairs and the interests of their local communities within the framework of the unitary Republic of Indonesia. The changes include the obligation to conduct development planning and control, as stated in Article 14 of the Local Government Law. Local government planning and budgeting are also shaped by other regulations, such as the Government of Indonesia Regulation Number 8/2008 and MoIA Regulation Number 54/2010 regarding guidance for regional development planning.

Government Regulation Number 8/2008 defines planning as a process for determining appropriate future actions by order of preference and taking into account available resources. Planning must always be associated with the future, but based on facts and events in the present and the past. Furthermore, planning is associated with action to be taken with consideration of available resources. Planning should be done carefully and seriously because of resource limitations (Republic of Indonesia, 2008a).

According to MoIA Regulation Number 54/2010, regional development planning is a process with staged activities that involves various stakeholders to use and allocate existing resources in order to improve social welfare in a region/area within a specified period. Stakeholders, in this context, are parties who are directly or indirectly affected by benefits or other impacts of the regional development planning and its implementation. The stakeholders can be grouped in categories, as outlined in Figure A.2 below.

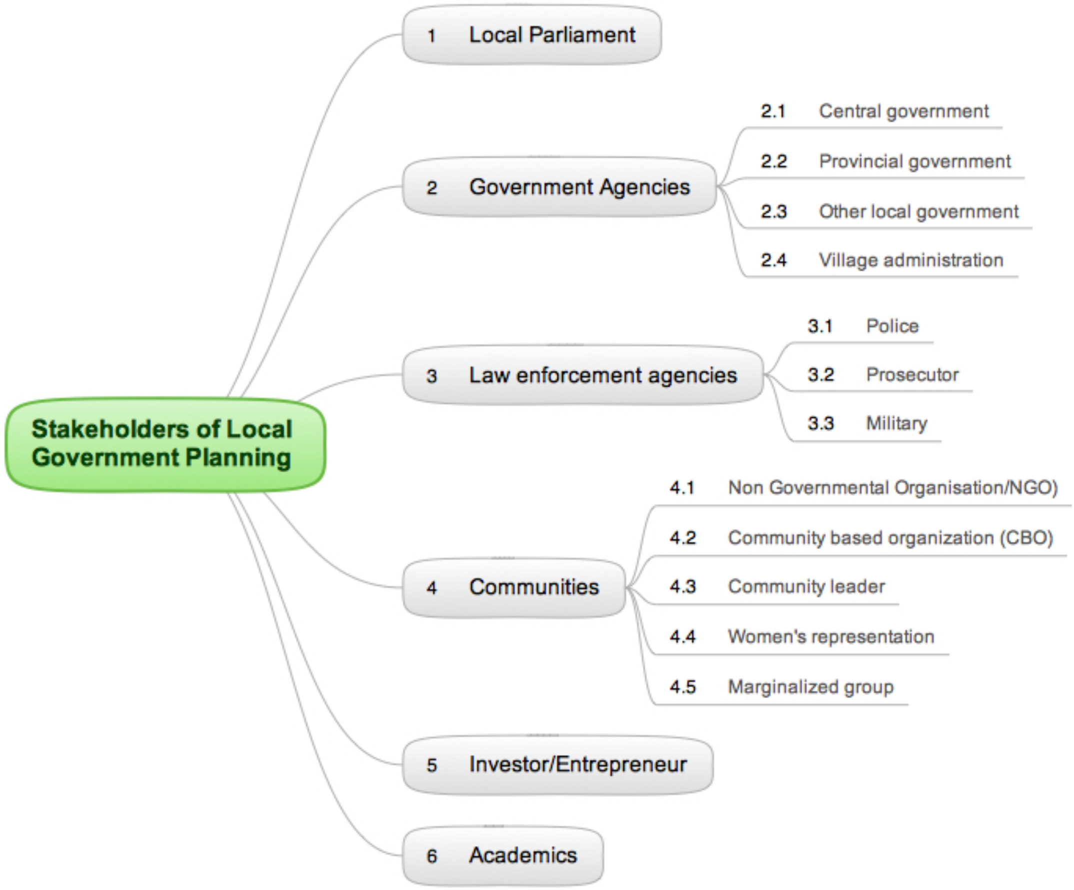

Figure A.2 Stakeholders in Local Government Planning

Source: Ministry of Internal Affairs Regulation No. 54/2010

Local parliament (*Dewan Perwakilan Rakyat Daerah* or DPRD) has a strategic role in local government planning. Local parliament is involved in certain steps of the planning process, and, at the end of the process, the results of the planning process have to be approved by local government as a stipulation of parliament. The central government, provincial government and local governments interact in the planning process. Even though there is less relationship between provincial and local governments and autonomy is the basis of the relation among government levels, as a unity nation, development planning of every government level has to be synchronized. The participation of communities is important in local government planning as planning is conducted using not only a top-down approach but also a bottom-up approach. These approaches ensure that planning accommodates the needs of the communities. Investors and entrepreneurs are economic agents that have an important role in development. Local government policies will affect their operations. Therefore, their advice is needed in the planning process. Participation of academics in local government planning indicates that the planning in local government is based on a technocratic approach and uses a scientific frame of mind and methodology (Republic of Indonesia, 2008a).

Generally, the process of local government planning involves activities that include an initial stage, preparing an initial draft, preparing the draft plan, meeting with stakeholders, preparing a final draft and a stipulation stage. The process is illustrated in Figure A.3 below.

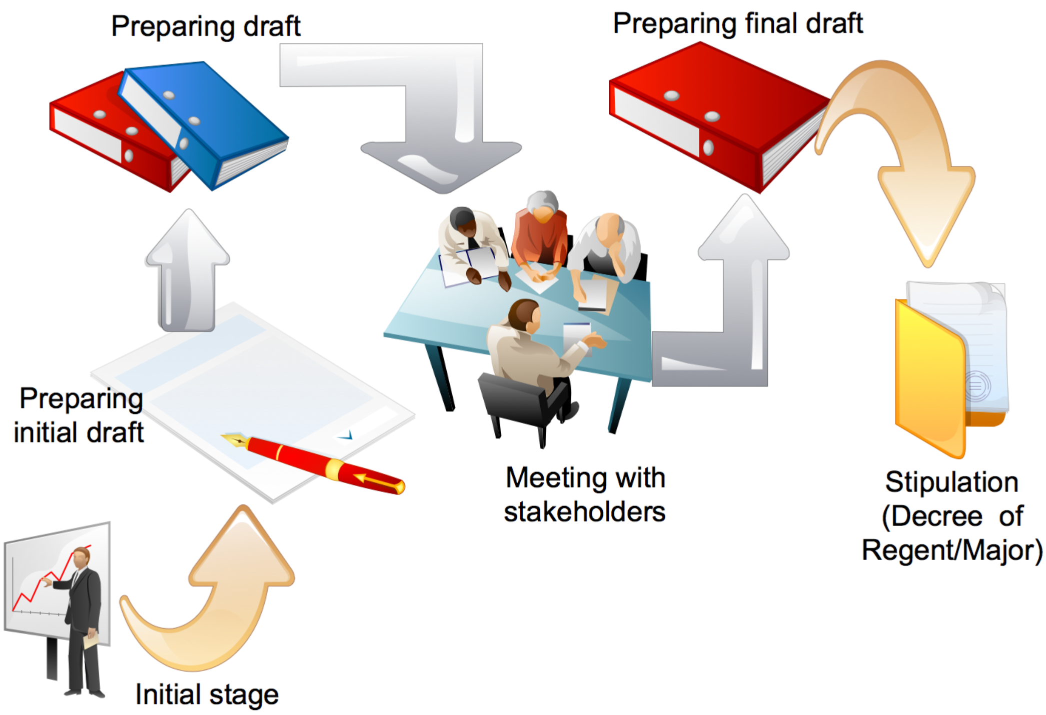

Figure A.3: General Process of Local Government Planning

Source: Ministry of Internal Affairs Regulation No. 54/2010

The scope of regional development planning covers the steps and procedures for preparing, controlling and evaluating implementation of the plan. There is a clear temporal dimension and requirements that a regional development plan consist of five separate planning documents:

1. Long-Term Regional Development Plan (*Rencana Pembangunan Jangka Panjang Daerah/RPJPD*) is a document that contains a development plan covering 20 years that involves vision, mission and direction of regional development during a specified period.

2. Mid-Term Regional Development Plan (*Rencana Pembangunan Jangka Menengah Daerah/RPJMD*) is a development plan for 5 years that includes a vision, mission and program of regent/mayor.
3. Annual Regional Development Plan *(Rencana Kerja Pemerintah Daerah/RKPD*) which contains the design of a regional economic framework, priority programs, an action plan and its financing. Further, this annual plan is one of the source documents for a local government's annual budget.
4. Mid-Term Plan for the regional government's units (*Rencana Stratejik Satuan Kerja Pemerintah Daerah/Renstra SKPD*) is a five-year planning for each unit of a local government.
5. Annual Plan for the regional government's units (*Rencana Kerja Satuan Kerja Pemerintah Daerah/Renja SKPD*).

In addition, local government planning relates to other forms of upper level government planning, such as provincial and central government, for the reason that Indonesia adopts a unitary national system. The position of local government planning in relation to national and province planning is described in Figure A.4 below.

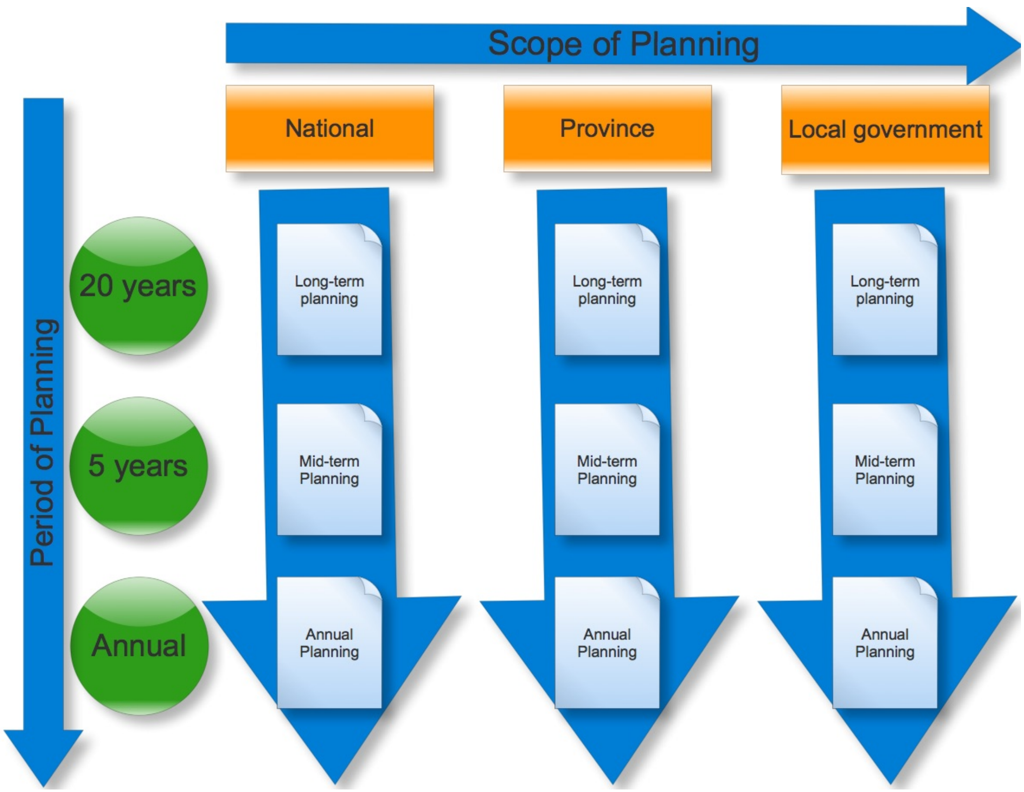

Figure A.4: The Two Dimensions of Local Government Planning

Source: Ministry of Internal Affairs Regulation No. 54/2010

The planning process is followed by the budgeting step. Budgeting processes at the local government level involve complex activities that take place every year.

Local government begins the annual process by preparing an annual plan (RKPD) based on the mid-term plan (RPJMD) and local government units' annual plans (Renja SKPD). However, during the process, local government should refer to central government's annual plan (RKP) in order to conform with national development planning. Based on the RKPD, the regent/mayor (assisted by a budgeting team/TAPD) prepares a draft called Kebijakan Umum APBD/KUA (general policies of budget) and Prioritas dan Plafond Anggaran Sementara/PPAS (priority and tentative ceiling of budget). The KUA and PPAS are submitted to local parliament (DPRD) for approval. Following approval of the KUA and PPAS by the DPRD, the *Tim Anggaran Pemerintah Daerah*/TAPD prepares the regent/Mayor's instruction regarding guidance for its subordinate units in preparing the action plan and its budget. Further, the units' Action Plan and Budget are reviewed by TAPD to assess conformity with KUA/PPAS and other criteria. If necessary, the TAPD will send back units' Action Plans and Budgets to be completed or corrected by the respective unit. Based on corrected/completed units' Action Plan and Budget, TPAD prepares a draft of a local government regulation regarding the annual budget and a draft of regent/mayor decree regarding the detailed explanation of the annual budget. The draft of the local government regulation regarding annual budget is submitted to local parliament/DPRD for approval. After a thorough approval process in DPRD, the approved draft of local government regulation regarding annual budget and the draft of the regent/mayor decree regarding the detailed explanation of the annual budget is submitted to the governor for evaluating its suitability with the public interest and higher level regulation. If the governor concludes that the draft conforms to the public interest and higher level regulation, based on the evaluated draft, the regent/mayor stipulates the local government regulation regarding annual budget and the regent/mayor makes a decree regarding the detailed explanation of the annual budget. Otherwise, the regent/mayor, together with DPRD, have to fix the draft. However, if the regent/mayor fails to fix the draft and stipulate the draft as local government regulation, the governor has authority to annul the regulation and states that the local government will use the same budget as the previous fiscal year (Minister of Internal Affair, 2006).

The process of budgeting is summarized in the diagram below.

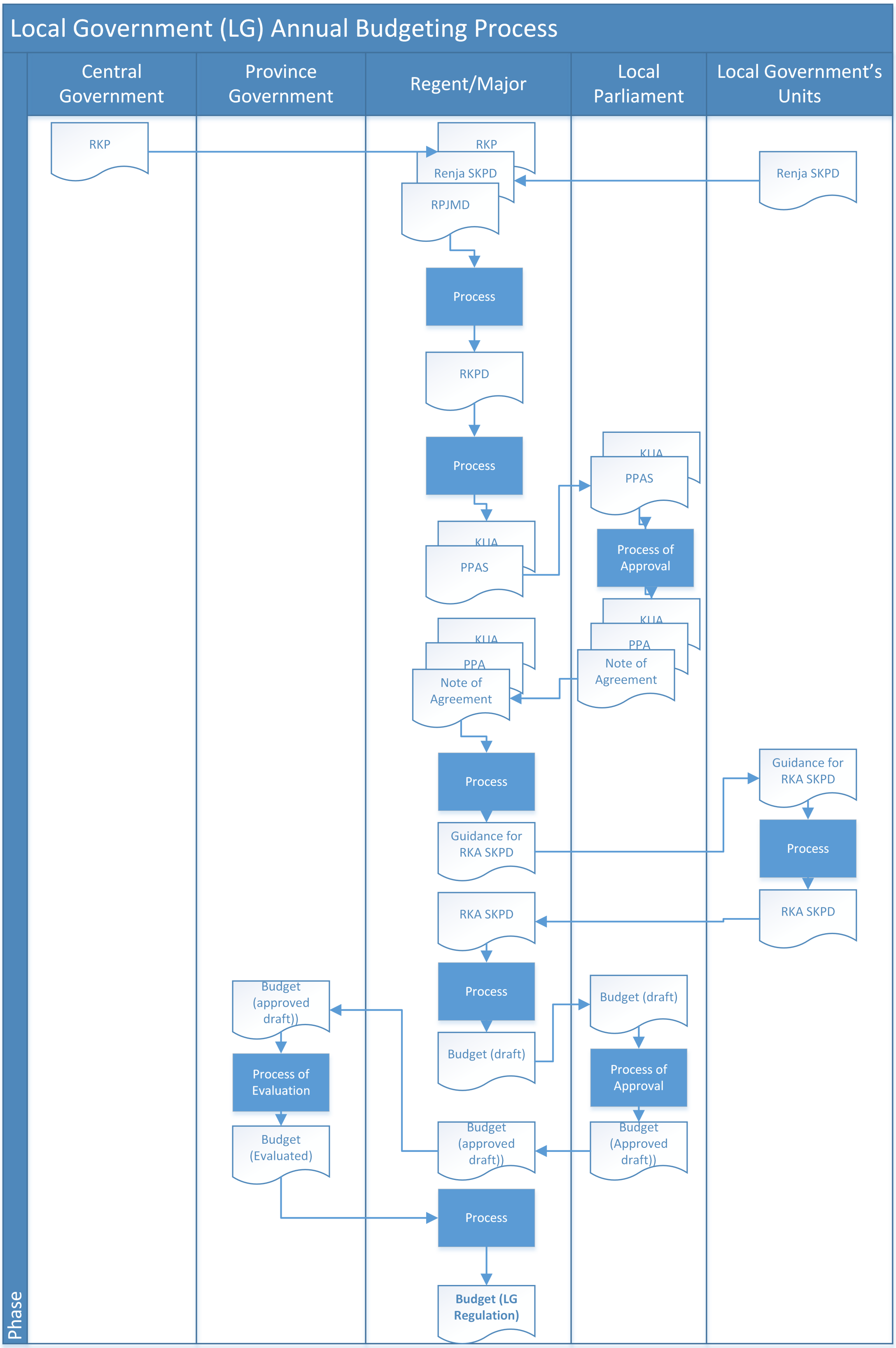

Figure A.5: Budgeting Process of Local Government

Source: Compiled from MoIA Regulation Number 13/2006

2. Executing and administering

Based on the DPRD-approved annual budget evaluated by the governor, local government can then begin the activities planned. This step consists of two inseparable activities: budget execution and budget administration. Generally, these activities involve subactivities as below:

1. Executing and administering revenues;
2. Executing and administering expenditure;
3. Executing and administering financing (reserve fund, investment, local government's liability and bond, and local government's accounts receivable).

The process of budget execution and administration, according to MoIA Regulation Number 13/2006, involves processes that occur in all units of local government.

After the stipulation of a regulation regarding the annual budget, a financial management officer (Pejabat Pengelola Keuangan Daerah or PPKD) asks all local government units to prepare a draft of the Budget Execution Document (DPA-SKPD) and cash budget or projected cash flow. Heads of unit submit the document to TAPD to allow TAPD, together with the heads of units, to verify the document. Based on the result of this verification and the secretary's approval, PPKD endorses the DPA-SKPD. The value of the budget set in DPA-SKPD is an available ceiling for budget execution for every local government unit as Budget User (PA) or his or her representative (KPA).

Management of local government revenue is a subprocess of budget execution and administration. Revenues are deposited to local government accounts in a state-owned bank by third parties directly, or to other banks/financial institutions/post offices by third parties, or to the treasurer for revenues. The treasurer for revenues has an obligation for administration of all revenue deposits that is in his or her responsibility. In order to conduct the duties, the treasurer for revenues uses records and documents, such as a general cash book, cash book for each revenue, book for daily recapitulation, local tax assessment document (Surat Ketetapan Pajak/SKP-Daerah), retribution assessment document (Surat Ketetapan Retribusi/SKR), deposit evidence and payment evidence. The treasurer for revenues has to account for his or her duties to Pengguna Anggaran (PA))/KPA and Treasurer of local government (Bendahara Umum Daerah/BUD) at least on the tenth day of every month.

Considering geographical difficulty, the treasurer for revenues can be helped by one or more assistants. The assistant has to report his or her duty to the treasurer for revenues on at least the fifth day of every month. In other cases, a regent/mayor can assign a bank/financial institution/post office to act as the treasurer for revenues. The institutions have to account the revenues to the regent/mayor through a local government treasurer.

The other subprocess of budget execution and administration is expenditure management. After preparing the cash budget, PPKD issues a letter for provision of funds (Surat Penyediaan Dana/SPD). The document authorizes local government units in disbursing cash. Base on the SPD, the treasurer for expenditures asks for payment using letter for payment request (Surat Permintaan Pembayaran/SPP). The SPP consists of four types with different purposes: SPP-UP (request for revolving fund), SPP-GU (refund for revolving fund), SPP-TU (requesting additional revolving fund) and SPP-LS (request for direct payment). PA/PKA issues a letter asking for payment (Surat Perintah Membayar/SPM) and is submitted to BUD. Based on SPM, BUD issues a letter for cash payment order (Surat Perintah Pencairan Dana/SP2D). SP2D is used to asking for payment in the bank that acts as the local government cashier. Further, the treasurer for expenditures is called to account for usage of revolving funds/refunding of revolving fund and additional revolving funds to Pengguna Anggaran/Kuasa Pengguna Anggaran (PA/KPA) through the unit's financial administrator (PPK-SKPD). Considering the size of the unit, amount of managed budget, workload, location, competency, span of control or other objective consideration, the treasurer for expenditures can be helped by one or more assistants. The assistant has to report his or her duty to the treasurer for expenditures at least by fifth day of every month (Minister of Internal Affair, 2006).

3. Accounting and reporting

According to Government Regulation Number 71/2010, local government accounting is based principally on basic accrual. It means revenue is recognized (recorded) when earned, and expenses are recognized when incurred. The accrual basis should be applied to the recognition of revenues, expenses, assets, liability and equity, unless the regulation states otherwise, such as accounting for budget realization that has to be conducted on a cash basis (Republic of Indonesia, 2010).

Local government accounting systems consist of four accounting procedures:

cash receiving, cash disbursement, assets and other than cash (Minister of Internal Affair, 2006). The system produces local government financial reporting that including (1) statement of budget realization; (2) statement of budget balance; (3) balance sheet; (4) statement of operation; (5) statement of cash flow; (6) statement of equity and (7) notes for financial statements (Republic of Indonesia, 2010). At the local government's unit level, at least three financial reports (statement of budget realization, balance sheet and notes for financial statements) are to be produced (Minister of Internal Affair, 2006).

4. Controlling

According to Ministry of Internal Affairs Regulation Number 13/2006, there are some control mechanisms that are arranged as part of the local financial system. The first control is supervision of budget execution by local parliament. This supervision is not an audit, but is an effort to ensure achievement of the objectives stated in local regulation regarding the budget. Law Number 32/2004, applied to local government, regulates that local parliament has three functions: legislation, budgeting, and supervision. With regard to these functions, local parliament has some authority as described below in Table A.1 below.

Table A.1: Authority of Local Government

Function	Authority
Legislating	• Initiating local government's regulation
Budgeting	• Approving of annual budget
Supervising	• Supervising execution of regulation, annual budget, and regent's/mayor's policies • Giving opinion and recommendation on local government's international cooperation • Approving of local government's international cooperation • Asking for head of district's/mayor's accountability reports • Approving of inter-local government cooperation and

Function	Authority
	third party cooperation that will burden on local government and society

Source: Law Number 32/2004

Considering the functions and the authorities listed above, local parliament has wide scope for control of local government finance. The control can begin at the planning and budgeting stage, because local parliament is involved in the annual budget discussion and approves the local government's regulation regarding to annual budget. Furthermore, local parliament oversees budget execution through meetings with heads of district/mayors or via field visits. Local parliament follows up the findings of its supervisory process by interpellation or investigation. At the end of the local budget cycle, local parliament asks for a regent's/mayor's report as a form of accountability (Republic of Indonesia, 2004b).

The second control is an audit of local government finances that consists of an external and an internal audit. The external audit is conducted by the Audit Board of the Republic of Indonesia (BPK-RI), and another is performed by internal government agencies, such as the Financial and Development Supervisory Board (*Badan Pengawasan Keuangan dan Pembangunan* or called as BPKP) and the local auditor agency. According to Law Number 15/2004, The Audit Board has responsibility and authority for conducting audits of public finance, including local government finance. The audits involve financial audits, performance audits and audits with specific purposes examining local government financial management and its accountability. According to Government Regulation Number 60/2008, an internal auditor conducts some supervisory activities involving audit, review, evaluation, monitoring and others. The audit consists of a performance audit and an audit with specific purposes.

The third mechanism is internal control established over local government finance. According to Government Regulation Number 60/2008, the regent/mayor is obligated to implement internal control over his or her activities. The internal control consists of five activities: control environment, risk assessment, control activities, information and communication, and monitoring. In Article 13, the regulation states that the head of a government agency is obligated to conduct a risk assessment involving risk identification and risk analysis. Furthermore, part II of the appendix of the regulation states that the head of a government agency formulates a risk management approach and controls activities for minimizing the risk (Republic of Indonesia, 2008c).

5. Accountability

According to MoIA Regulation Number 13/2006, accountability of local government budget execution is conducted through half-yearly and yearly reporting. For half-year reporting, the regent/mayor submits to local parliament a first semester budget realization report and a prognosis for the second semester. After the end of the fiscal year, the local government units submit their financial statement (statement of budget realization, balance sheet and notes for financial statements) to the regent/mayor. The local government's financial manager (Pejabat Pengelola Keuangan Daerah/PPKD), based on the unit's financial statements and other information, prepares for the local government's financial statement and performance report. The Audit Board conducts an audit on the local government's financial statement and performance report. The audited financial statement must be publicized. The regent/mayor submits a draft of the accountability report (with audited financial statement, audited performance report, and summary of local government-owned enterprises' financial statements attached) to local parliament seeking approval. The approved accountability report is submitted to the provincial government for evaluation. If the evaluation states that the report aligns with regulation and public interest, the regent/mayor stipulates the report as local government regulation, otherwise the regent/mayor, together with DPRD, has to fix the draft. However, if the regent/mayor fails to fix the draft and stipulates the draft as local government regulation, the governor has the authority to annul the regulation (Minister of Internal Affair, 2006). The process of accountability is described in the flowchart in Figure A.6 below.

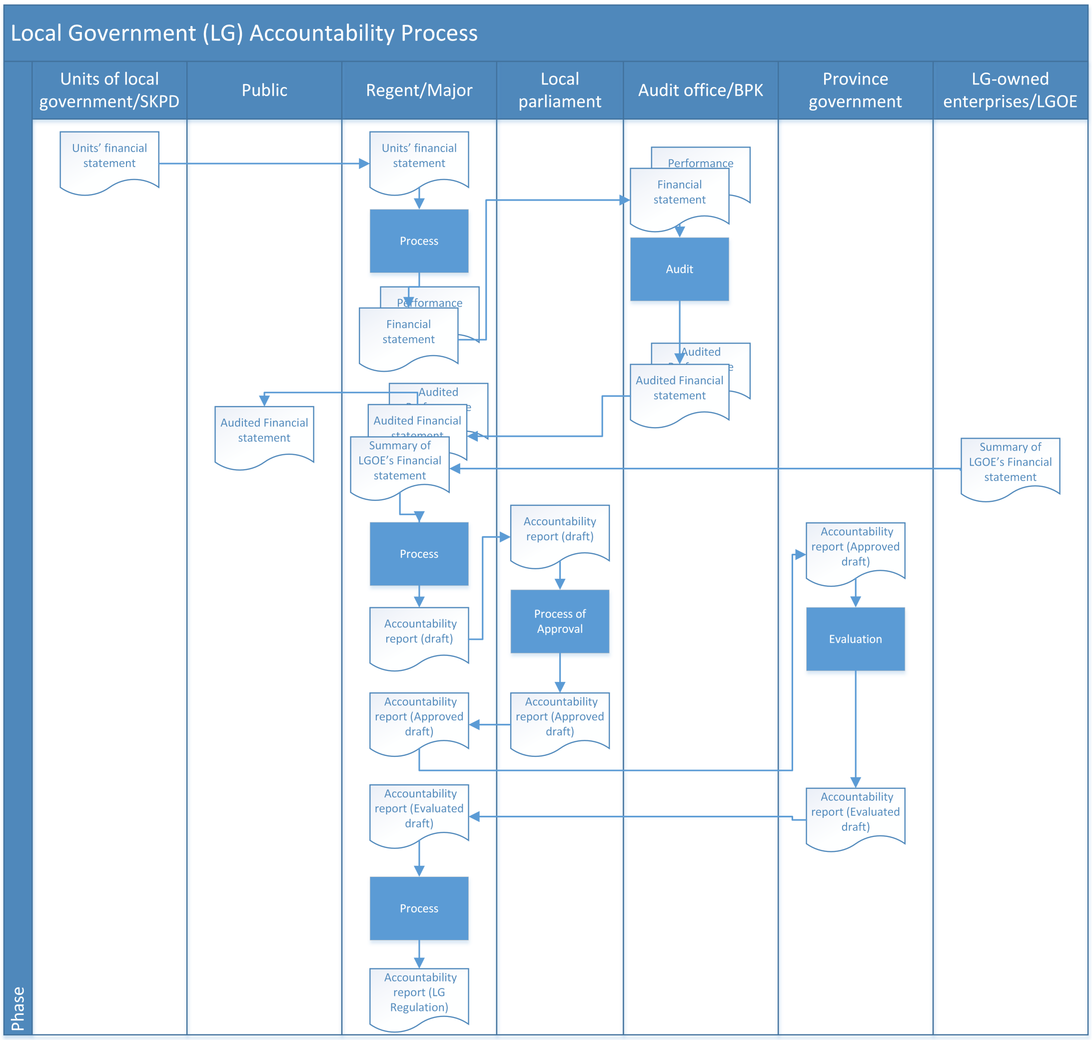

Figure A.6: Local Government Accountability Process

Source: Compiled from MoIA Regulation Number 13/2006

This overview of local government financial processes shows that it is very complicated. The local government cycle involves many processes, subprocesses and steps. Most of them are mandated by regulations. There is always a possibility that certain processes, subprocesses or steps are not accomplished. This presents a risk because it may impact on local government achieving its objectives. The cycle also involves all of the local government units. Hundreds of units may be included in the processes, directly or indirectly. Smooth and strong coordination among the units is required as an important part of local government finance. Failures of coordination may cause failures to achieve objectives, that is, they may trigger the risk. Because the cycle involves all local government units, it affects all aspects of local government service delivery. This means that problems in the cycle can influence public satisfaction and may lead to further risks.

The cycle involves relations between government levels and with other local governments. For example, at the end of the planning and budgeting process, local government needs the budget evaluation result from the provincial government in order to continue with stipulation of the budget. Local government cannot ignore the planning of the surrounding local governments, for the reason that there is always service delivery that needs cooperation among local governments.

Further, the financial cycle has some inherent weakness. For example, in the controlling step, the control seems to be adequate. However, there is a classical problem therein. The audits conducted by an external auditor (The Audit Board) involve a financial audit, performance audit, and audit with the specific purpose of examining local government financial management and its accountability. On the other hand, according to Government Regulation Number 60/2008, an internal auditor conducts some supervisory activities involving audit, review, evaluation, monitoring and others. The audit consists of performance audit and audit with specific purposes. These appear to overlap with the external auditor's authority. This raises concern about the efficiency and effectiveness of the controlling phase.

From a risk management point of view, the cycle lacks guidance for implementing risk management in local government finance. As mentioned earlier, Government Regulation Number 60/2008 mandates risk assessment within the internal control context. However, the regulations give insufficient guidance for conducting risk assessment, and for developing and implementing a risk management system. All of these issues may expose the local government financial cycle to risk.

APPENDIX B: RESULT OF MULTIPLE REGRESSION

Table B.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.532[a]	.283	.182	.49215

a. Predictors: (Constant), Terrorism and riot risks, Tax managing risks, Operational risks, Human resources risks, Other risks, Lack of resources risks, Financial risks, Strategic risks, Recording and reporting risks, Data loss and system failure risks, Financial managing risks

b. Dependent Variable: OBJ_AVG

Table B.2: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.457	11	.678	2.799	.004[b]
	Residual	18.893	78	.242		
	Total	26.350	89			

a. Dependent Variable: OBJ_AVG

b. Predictors: (Constant), Terrorism and riot risks, Tax managing risks, Operational risks, Human resources risks, Other risks, Lack of resources risks, Financial risks, Strategic risks, Recording and reporting risks, Data loss and system failure risks, Financial managing risks

Table B.3: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.517	.052		67.788	.000
	Financial managing risks	-.141	.072	-.254	-1.951	.055
	Operational risks	.029	.060	.050	.473	.638
	Lack of resources risks	-.053	.061	-.093	-.873	.385
	Human resources risks	.022	.061	.037	.353	.725
	Other risks	-.172	.064	-.306	-2.682	.009
	Strategic risks	-.008	.064	-.013	-.120	.905
	Recording and reporting risks	.107	.066	.191	1.608	.112
	Financial risks	-.037	.061	-.064	-.600	.550
	Data loss and system failure risks	.051	.069	.093	.735	.465
	Tax managing risks	-.128	.065	-.227	-1.963	.053
	Terrorism and riot risks	.168	.062	.289	2.697	.009

a. Dependent Variable: OBJ_AVG

APPENDIX C: RISK MATRIX

Table C.1: Risk Map

Risk Map						
Likelihood	A -	Almost certain		LG1.25	LG3.12 LG3.14	LG2.39 LG1.17
	B -	Likely		LG2.1 LG1.16 LG3.13 LG3.19	LG2.2 LG2.7 LG2.8 LG2.15 LG2.18 LG2.25 LG2.37 LG2.38 LG1.2 LG1.7 LG1.19 LG1.21 LG1.23 LG1.24 LG1.26 LG1.27 LG3.20	LG2.13 LG2.17 LG2.19 LG2.21 LG2.22 LG2.24 LG2.26 LG2.27 LG2.28 LG1.6 LG3.2
	C -	Possibl e	LG3.7 LG3.9	LG2.6 LG2.31 LG1.1 LG1.15 LG3.3 LG3.5 LG3.11 LG3.15 LG3.17 LG3.21	LG2.3 LG2.4 LG2.5 LG2.16 LG2.23 LG2.30 LG2.32 LG1.3 LG1.4 LG1.14 LG3.1 LG3.6 LG3.18	LG2.12 LG2.14 LG2.20 LG2.29 LG2.36 LG1.5 LG1.8 LG1.9 LG1.12 LG1.22 LG3.8
	D -	Rare	LG3.4 LG3.10 LG3.16		LG2.33 LG1.18	LG2.9 LG2.10 LG2.11 LG2.34 LG2.35 LG1.10 LG1.11 LG1.13 LG1.20
			1- Low	2 - Medium	3 -High	4 - Very High
			Impact			

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.

Table C.2: List of Identified Risks

No	CODE	Risk Description
1	**3**	**2**
Local Government 1		
1	LG1.1	Programs and activities are not conducted as scheduled
2	LG1.2	Inadequate equipment (in quantity and quality)
3	LG1.3	Budget is not approved as scheduled
4	LG1.4	Inadequate equipment (in quantity and quality)
5	LG1.5	Poorly skilled staff
6	LG1.6	Posting inappropriate account
7	LG1.7	Budget is not approved as scheduled
8	LG1.8	Inadequate evidence of accounting posting
9	LG1.9	Transactions not recorded
10	LG1.10	Failure of accounting system
11	LG1.11	Earth quake, food and other natural disasters
12	LG1.12	Manipulation of payment and/or deposit evidences
13	LG1.13	Legal risk
14	LG1.14	Political changes
15	LG1.15	Changing organizational structure, functions and job description
16	LG1.16	Poorly skilled staff
17	LG1.17	Shortage of employees
18	LG1.18	Fire
19	LG1.19	Frequent Employee turnover
20	LG1.20	Expenditures excess the targeted revenues

No	CODE	Risk Description
1	**3**	**2**
21	LG1.21	Failure of budgeting system
22	LG1.22	Theft and misuse of assets
23	LG1.23	Central government's policy changes
24	LG1.24	Financial reporting is not accordance with regulation
25	LG1.25	Manipulation of payment and/or deposit evidences
26	LG1.26	Substandard performance of activity output
27	LG1.27	Regulation changes
Local Government 2		
1	LG2.1	Improper expenditures classification in planning
2	LG2.2	Improper payment request documents (SPP, SPM)
3	LG2.3	Improper fixed asset recording
4	LG2.4	Improper expenditure recording
5	LG2.5	Improper presentation of Balance sheet and budget realisation report
6	LG2.6	Weaknesses in financial report review
7	LG2.7	Improper payment authorisation document (SP2D)
8	LG2.8	Improper expenditure evidences
9	LG2.9	Double payment of expenditure
10	LG2.10	Loss of local m revenue from interest
11	LG2.11	Loss of cash
12	LG2.12	Loss of revenue from fines
13	LG2.13	Loss of revenue from asset rent
14	LG2.14	Loss of revenue from asset selling
15	LG2.15	Improper account receivable recording
16	LG2.16	Incomplete potential tax data
17	LG2.17	Loss of inventory
18	LG2.18	Improper inventory recording
19	LG2.19	Financial report is not align to standards
20	LG2.20	Incomplete documents of assets disposal
21	LG2.21	Asset damage
22	LG2.22	Loss of fixed assets
23	LG2.23	Improper asset recording and reporting
24	LG2.24	Legal risk of asset ownership
25	LG2.25	Suppliers fail to fulfil contract schedule
26	LG2.26	Contract payment exceeds the supplier achievement
27	LG2.27	Usage of fund is not align with the local government regulation
28	LG2.28	Payment to employee is not align with regulation
29	LG2.29	Legal risk of investment that is not supported with needed regulation
30	LG2.30	Person in charge of an activity does not have required competencies.
31	LG2.31	Members of procurement committee do not have required competencies
32	LG2.32	The number of available personnel do not match the needs

No	CODE	Risk Description
1	**3**	**2**
33	LG2.33	The process of good/service procurement do not run as scheduled
34	LG2.34	There is no participant in procurement/auction processes
35	LG2.35	The conducted auction is failed
36	LG2.36	Lack of understanding of procurement regulation
37	LG2.37	Unsatisfied services to tax payer
38	LG2.38	Regulation changes
39	LG2.39	Frequent Employee turnover
Local Government 3		
1	LG3.1	Regulation changes
2	LG3.2	Shortage of infrastructure
3	LG3.3	Payments exceed the budget
4	LG3.4	Loss of accounting data
5	LG3.5	Legal risk
6	LG3.6	Technology innovations/changes
7	LG3.7	Agencies' financial statements are not presented on time
8	LG3.8	Timeliness of payment document completion
9	LG3.9	Changing organizational structure, functions and job description
10	LG3.10	Supplier failure to fulfil the contracts
11	LG3.11	Timeliness of budget approval
12	LG3.12	Unqualified opinion for financial statements is not achieved
13	LG3.13	Inadequate document management
14	LG3.14	Frequent Employee turnover
15	LG3.15	Revenue target is not achieved
16	LG3.16	Improper account setting in budgeting process
17	LG3.17	Timeliness of payment document completion
18	LG3.18	Improper recording
19	LG3.19	Local government's financial statement is not presented on time
20	LG3.20	Poorly skilled staff
21	LG3.21	Inappropriate value of budget

APPENDIX D: LIST OF INTERVIEWEES

No	Code	Institution	Echelon	Date of Interview
1	101	Planning agency	3	27-Apr-14
2	102	Planning agency	2	28-Apr-14
3	103	Audit office	3	06-May-14
4	104	Audit office	4	07-May-14
5	105	Implementing agency	3	12-May-14
6	106	Implementing agency	3	12-May-14
7	107	Local parliament	Member of Local parliament	13-May-14
8	108	Financial service agency	2	27-May-14
9	109	Financial service agency	3	28-May-14
10	110	Financial service agency	3	28-May-14
11	111	Implementing agency	4	28-May-14
12	112	Implementing agency	3	12-May-14
13	201	Financial service agency	3	09-Jun-14
14	202	Financial service agency	3	10-Jun-14
15	203	Financial service agency	4	10-Jun-14
16	204	Implementing agency	2	10-Jun-14
17	205	Implementing agency	3	11-Jun-14
18	206	Financial service agency	3	11-Jun-14
19	207	Financial service agency	3	11-Jun-14
20	208	Planning agency	3	06-Jun-14
21	209	Local parliament	Member of Local parliament	12-Jun-14
22	210	Financial service agency	3	12-Jun-15
23	211	Financial service agency	3	13-Jun-14
24	212	Audit office	4	13-Jun-14
25	213	Audit office	3	13-Jun-14
26	214	Planning agency	4	13-Jun-14

No	Code	Institution	Echelon	Date of Interview
27	301	Financial service agency	3	26-Jun-14
28	302	Local parliament	Member of Local parliament	26-Jun-14
29	303	Financial service agency	3	27-Jun-14
30	304	Audit office	3	29-Jun-14
31	305	Implementing agency	3	30-Jun-14
32	306	Planning agency	3	30-Jun-14
33	307	Audit office	2	29- Jun-14 and 01-Jul-14
34	308	Financial service agency	3	01-Jul-14
35	309	Implementing agency	4	02-Jul-14
36	310	Financial service agency	3	02-Jul-14
37	311	Implementing agency	2	03-Jul-14
38	312	Financial service agency	3	04-Jul-14
39	401	Central government	Staff	05-Jul-14
40	402	Central government	Staff	07-Jul-14
41	403	Central government	Staff	07-Jul-14
42	404	Central government	Staff	07-Jul-14
43	405	Central government	Staff	07-Jul-14
44	406	Central government	Staff	07-Jul-14

APPENDIX E: DESCRIPTION OF GOVERNMENT REGULATION NUMBER 60/2008

The law contains four chapters and 61 clauses. Chapter I sets the general terminology used in the chapter and consists of two clauses. Clause 1 provides definitions relating to the law. Clause 2 is a mandate clause for ministers/leaders of institutions, governors and regents/mayors to carry out internal control in governmental activities as guided by SPIP. Clause 2 also defines objectives of SPIP to provide reasonable assurance for achieving effectiveness and efficiency of government objectives, the reliability of financial reporting, the safeguarding of the government assets, and adherence to regulations.

Chapter II describes the components of SPIP. It contains six parts and 44 clauses. The first part defines the five components of SPIP and a mandate for implementing the components as integrated parts of government institution activities. The other parts describe each component of SPIP: control environment, risk assessment, control activity, information and communication, and monitoring (Republic of Indonesia, 2008c).

Chapter III describes efforts for strengthening the effectiveness of SPIP implementation. The general part of this chapter (Part I) reaffirms the responsibility of the minister/leader of an institution, governor, and regent/mayor in implementing SPIP based on their own circumstances. The chapter also regulates internal supervision involving audit, review, evaluation, monitoring and other supervision activities. The last part of the chapter assigns the Financial and Development Supervisory Board (called BPKP/*Badan Pengawasan Keuangan dan Pembangunan*) for preparing and providing guidance in SPIP implementation that involves activities, such as providing technical guidance of SPIP implementation, providing information regarding SPIP, providing SPIP education and training, providing SPIP assistance and consultation, and competency improvement of government internal auditor.

Chapter IV is the closing part of the regulation. Clause 60 of the chapter states that SPIP at the regional level (provincial and local government) is arranged by governor and regent/mayor regulations. Further, Clause 61 defines that the regulation has been applied since August 28, 2008. The summary of the first part of PP 60/2008 is presented in Table A5.1 below.

Table E.1: The first section of Government Regulation Number 60/2008

Chapter	Part	Clause
Chapter I: General terms		2 clauses (Clauses 1-2)
Chapter II: the Components of SPIP	Part 1: General	1 clause (Clause 3)
	Part 2: Control Environment	9 clauses (Clauses 4–12)
	Part 3: Risk Assessment	5 clauses (Clauses 13–17)
	Part 4: Control Activity	23 clauses (Clause 18–40)
	Part 5: Information and Communication	2 clauses (Clauses 41–42)
	Part 6: Monitoring	4 clauses (Clauses 43–46)
Chapter III: Strengthening of SPIP Implementation Effectiveness	Part 1: General	1 clause (Clause 47)
	Part 2: Internal Supervision on the Discharge of Duties and Function of Government Agencies	11 clauses (Clauses 48–58)
	Part 3: Guidance in SPIP implementation	1 clause (Clause 59)
Chapter IV: Closing		2 clauses (Clause 60–61)

Source: Summarized from Government Regulation Number 60/2008

The second section of the regulation is the explanation. In addition to per clause explanation, the section describes the background and reasons for the SPIP enactment. SPIP is the fulfillment of the need for more accountable and transparent state financial management systems. Further, development of SPIP components has roles as guidance and benchmark tests for the implementation. Therefore, the components developed should be considered based on their cost and benefit, human resources, effectiveness measurement criteria, and information technology.

The third section is the appendix. The appendix contains internal control checklists. It consists of a preface, five parts on internal control components, and an overall summary of internal control. As mentioned in the preface, the checklist is intended for assisting government institution leaders and evaluators in determining how well the internal control is designed and implemented. The preface also states that the checklist is mainly adopted from the United States General Accounting Office's (GAO's) Internal Control Management and Evaluation Tool that was published in August 2001 (General Accounting Office, 2001; Republic of Indonesia, 2008c).

Part one of the appendix is a checklist for the control environment component that is designated for evaluating the establishment of an environment throughout the government institution that establishes a positive and supportive attitude toward internal control and sound management. The part consists of seven sections involving integrity and ethical values, commitment to competence, conducive leadership, organizational structure, assignment of authority and responsibility, human resource policies and practices, and establishing effective government internal supervision.

Part two describes a checklist for risk assessment. It is intended for evaluating the effectiveness of risk assessment in a government institution. Further, as mentioned in its preface, government institution leaders should formulate risk management approaches and risk control activities as needed for mitigating risks. The checklist consists of five sections involving determining overall objectives of the agency, determining objectives for activity level, risk identification, risk analysis, and managing risk during the changes. Each section contains points for assessing effectiveness of risk assessment in the internal control context.

Part three presents a checklist for control activities. In this regulation, control activities are defined as policies and procedures that help ensure that management's directives mitigating risks, identified during the risk assessment process, are carried out. The checklist includes sections regarding general application, review on government institution performance, human resource development, control of information systems, physical control over assets, establishing and reviewing performance indicators and measures, segregation of duties, execution of transactions and events, recording of transactions and events, access restriction to resources, accountability for resources and records, and documentation of the system.

Part four is a checklist for information and communication components that is designated for evaluating how well government institutions are applying appropriate information and communication components that support the implementation of internal control. This part contains three sections: information, communication, and forms and means of communication.

The fifth part is a checklist for monitoring components. The checklist is intended to evaluate whether the monitoring aspect is designed and applied properly in supporting internal control implementation. The checklist involves sections covering parts of the monitoring component, such as ongoing monitoring, separate evaluation, and audit resolution.

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