

CORRUPTION IN CONSTRUCTION

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To my beloved mother, father, brother and sisters

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Praise to God, the Most Gracious and Most Merciful,

Who has created the mankind with knowledge, wisdom and power. Being the best creation of God, one still has to depend on others for many aspects directly and indirectly. This is, however, not an exception that during the course of study the author received so much of help, co-operation and encouragement that need to be duly acknowledged. First of all the author wishes to express profound gratitude to his supervisor Mr Abdul Rahim Abdul Hamid for the noble guidance and valuable advice throughout the period of study. A special gratitude to His Divine Grace Dato Seri Guruji, for love and dedication for promoting research and development have paved the way to attain a smooth finishing of the present study.

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ABSTRACT

Corruption in construction is a fiduciary crime that is believed to slowly penetrate the construction sectors in countries around the world. It that can reduce the efficiency, effectiveness and equity of infrastructure services that resulted in construction projects that is unnecessary, unsuitable, and defective. In order to control effectively the level of corruption in construction, the critical factors of corruption in construction need to be correctly diagnosed. Hence, the objective of this paper is to review the causes of corruption in construction, consequences and method to minimize corruption in construction industry. The aim of this project is to identify causes of corruption and determine method or strategy to minimize corruption effectively. Based on survey outcome it can be classified that objectives are achieved due to the information are tally based from literature review and survey. It has been agreed by most of the respondent on the listed objectives, and only differs in term of score of the attributes. Base on the data analyzed from this study the main causes of corruption are weakening of society value with highest score follows by bids and tender are 'set up' and the third attributes was inefficient administration, while the consequences are consultants increase the quantities of work and share the proceedings with contractors, demand payment for task carried out by consultants, and hike of cost due to the hidden cost. As for step to prevent following steps would probably be the strategy to minimize corruption in construction which, implementing a comprehensive ethics program, establishing a corporate code of conduct and report it to the police or anti-corruption bureau. Thus, throughout the study, individual attitude, laws and regulations and administrative control are imperative factors critical to corruption in construction.

ABSTRAK

Rasuah dalam industri pembinaan merupakan satu jenayah yang dipercayai menusuk masuk ke dalam industri pembinaan di seluruh negara. Gejala ini boleh memudaratkan industri pembinaan dari segi kualiti equiti infrastruktur dimana berpunca daripada projek pembinaan yang tidak perlu dan penuh dengan kecacatan. Berpandukan kepada masalah rasuah, satu cara yang efektif perlu diambil demi membendung gejala ini menunjukkan belang, terutamanya mengenalpasti faktor kritikal atau punca utama perlu di ubati. Justeru, objektif kajian ini adalah untuk mengenalpasti faktor yang menyebabkan rasuah, impak rasuah terhadap industri pembinaan dan cara untuk meminimumkan gejala ini secara efektif. Manakala matlamat projek ini adalah untuk mengenalpasti faktor yang menyebabkan rasuah dan mengenalpasti cara atau strategi yang dapat meminimumkan gejala rasuah secara efektif. Berpandukan kepada survey boleh diklasifikasikan bahawa objektif dicapai dengan kesalarian maklumat daripada kajian literatur dan survey. Kebanyakan responden telah bersetuju dengan objektif dan hanya berbeza dari segi pandangan pemarkahan bagi setiap sub karakter. Melalui data analisis, faktor utama yang membawa kepada berlakunya rasuah adalah kelemahan nilai-nilai murni di kalangan rakyat dengan skor paling tinggi diikuti dengan proses tender yang telah diatur dan yang ketiga tertinggi adalah kekurangan dari segi pengurusan, manakala kesanya adalah, dimana perunding menambah kuantiti kerja demi berkongsi keuntungannya bersama kontraktor, dan permintaan bayaran terhadap segala tugas yang dilakukan oleh perunding, dan peningkatan harga projek disebabkan kos tersirat. Sebagai, cara untuk mengatasi adalah dengan melaksanakan program etika, memperkenalkan kod tatatertib atau budaya, dan melaporkan kepada pihak polis atau suruhanjaya pencegah rasuah. Justeru sepanjang kajian perangai individu, undang-undang dan pengurusan menjadi faktor yang kritikal mendorong kepada gejala rasuah dalam industri pembinaan.

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LIST OF ABBREVIATIONS

ILO	International Labour Organization
TI	Transparency International
NKRA	National Key Results Area
CPI	Corruption Perception Index
CIDB	Construction Industry Development Board
NIS	National Integrity System
AI	Average Index

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Corruption is critical unforeseen virus which penetrating our construction industry since decades ago, corruption can be define as bribery extortion cheating misuse of power given for personal benefit without considering or by neglect others safety or privilege as well. Type of corruption can be group in to two which high level and low level which involving petty cash. Corruption has been defined as “dishonest or illegal behaviour, especially of people in authority making deals which come in many forms and can distort the allocation of resources and performance of firms or government in many ways” (Hornby 2002:261). Bribery as it is defined by the Shorter Oxford English Dictionary Based on Historical Principles, Third Edition published by Clarendon Press, Oxford (Volume 1, page 236) as “theft, robbery; extortion; the exaction or taking of a bribe”, clearly constitutes a type of the dishonest behaviour cited by Hornby (2002). The impact of corruption on the construction industry will depend on what bribery sets out to achieve and any form of corruption is harmful to economic growth. When corruption is associated with organised crime, legitimate business tends to be discouraged as potential clients become afraid to invest, and the allocation of resources is distorted by those in control of investment opportunities. Misuse of scarce

resources in the construction industry means less development in the country and, in terms of political legitimacy, any development, which may occur, is usually perceived as being compromised. Corruption has a pervasive and negative impact on the poor since it distorts both public and private choices in favour of the wealthy. The authorities' powerfulness reduces the capacity of individuals, businesses and the State to provide a social safety net.

1.2 Problem Statement

Corruption is now widely recognized as a considerable obstacle to the efficiency of development aid (Soreide, 2005). Krishnan (2009) indicates that corruption in construction projects could only be eliminated if all participants in project cooperated in the development and implementation of effective anticorruption action which addressed both the supply (bribe giver) and demand (bribe taker). Fighting corruption is one out of six National Key Results Area (NKRA) of Malaysia. The aim is to arrest Malaysia's Transparency International (TI). Corruption Perception Index (CPI) that drops from 23rd place in 1995 to 56th place in 2010. Numerous transparency initiative strategies have been formulated across the globe. For instance in Hong Kong is the establishment of Independent Commission against corruption , while in Singapore is the formation of Corruption Prevention Investigation Bureau and in our country Malaysia is by having Malaysia Anti Corruption Agent Commission and National Integrity Plan and Institute. These bodies are established as one of the method or strategies to combat corruption in construction. Corruption not only giving impact on economy but also infrastructure and lost of life. Corruption in construction project may give negative impact such as rise of cost cause by hidden cost used for bribery purpose, therefore some of the project will cost extremely high cost which is not plausible. (Datuk Ir. Hamzah Hasan, 2010)

1.3 Aim and Objectives of Study

The aim of this study is to identify causes of corruption and determine method or strategy to minimize corruption effectively and the objectives of this study are as follows:

- I. To determine causes of corruption in construction
- II. To determine impact of corruption in construction
- III. To identify method or strategy to minimize corruption in construction

1.4 Scope of Study

The scopes of data collection in this study will focus on the aspects as follows:

- i. The construction company such as contractor who involved in building and infrastructures construction.
- ii. The selected construction company must be in the range of Class A till Class F for those register under Pusat Khidmat Kontraktor (PKK) or Grade G1 till G6 for those register under Construction Industry Development Board (CIDB).
- iii. The selected construction company also must have their own's managerial staffs such as project managers and site manager as well as their subordinates like site supervisors, architect, quantity surveyor and administration staff excluding foreman and labours.
- iv. The selected construction companies are located around the Johor Bahru due to the availability of good number of projects.

- v. The respondent will focus on first line managers.

Furthermore the scope will covers on causes, and method or strategy to minimize corruption in construction industry.

1.5 Methodology of Study

In this study, the following methodology has been adopted in order to achieve the objective of the study and the methodology of study is illustrated in Figure 1.1 which is being carried out in four (4) stages.

- i. In order to achieve the first objective review from previous research data and books while,
- ii. The third and final objectives were achieved through the questionnaire survey in order to obtain real scenario data from managers.

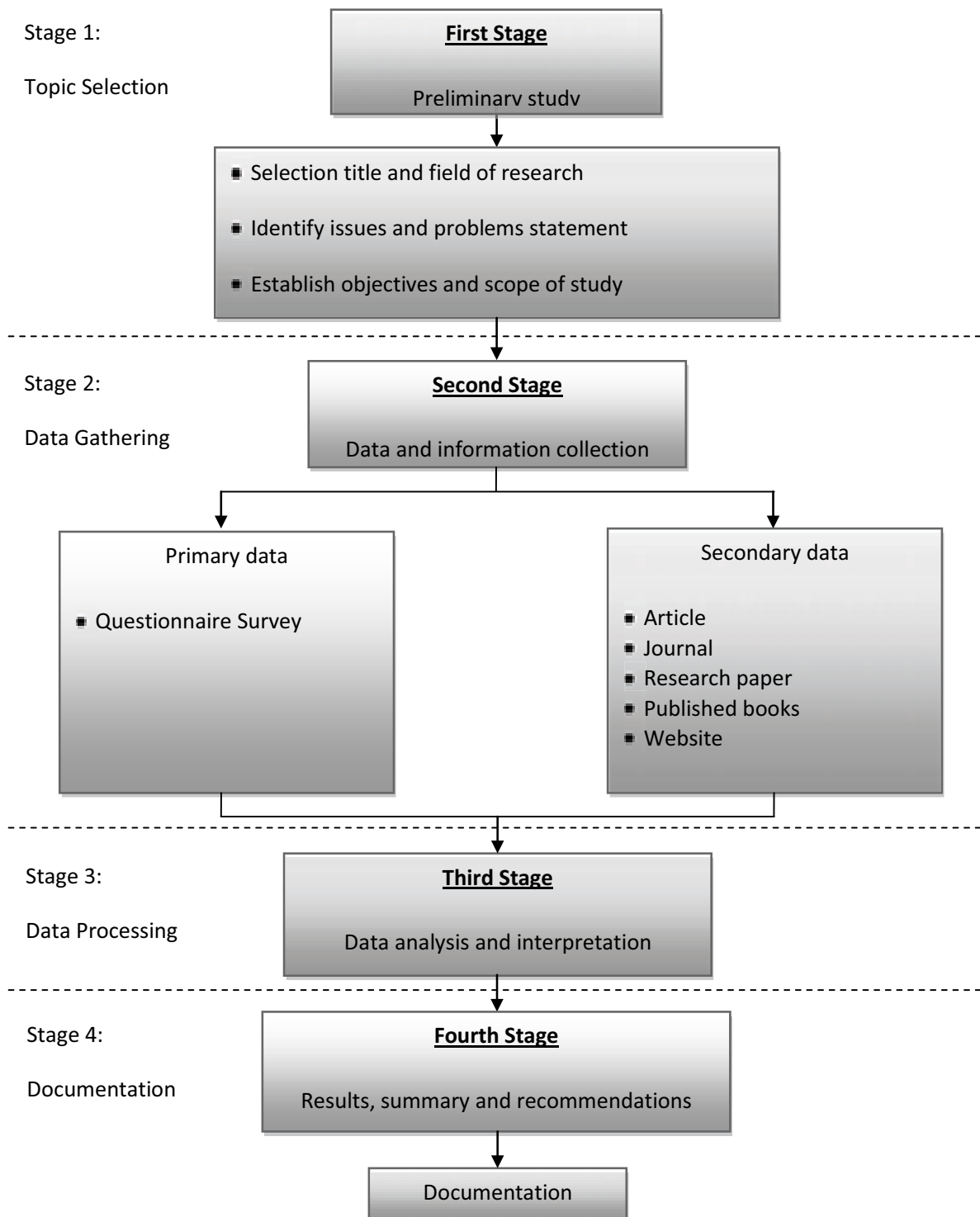


Figure 1.1: Methodology of Study

1.6 Arrangement of Report

The study report consists of five chapters where the content of each chapter are summarized as follows:

Chapter 1 consist of introduction of the entire study and provides an overall view of the study. It covers the introduction, problem statement, aim and objectives of study, scope of the study, methodology of study and arrangement of report.

Chapter 2 focus in literature review that based on findings from various different sources of information such as journal, technical papers, books, research paper etc. This chapter includes introduction, definition of corruption, types of corruption, causes of corruption, impact of corruption, method or strategy to minimize corruption.

Chapter 3 describe in detail on the methodology of study which covered all the stages in preparation of this study report.

Chapter 4 analysed the data using frequency analysis and average index analysis from the questionnaire survey. Chapter 4 also will discuss in detail all the data analysed and the findings will be highlighted.

Chapter 5 concludes all the finding which leads to the achievement of the objectives of the study. This chapter also suggests some recommendation for further study.

REFERENCES

- Abdullah, N. R. W. (2008) Eradicating Corruption: The Malaysian Experience. *Journal of Administration and Governance*, Vol. 3, No. 1.
- Al-Atas, Hussein S., (1999). *Corruption and the Destiny of Asia* (Singapore, Simon and Schuster (Asia) Pte. Ltd.).
- Albrecht, W.S.(1995). *Bringing the light to the dark side of business*. 2nd Edition, Irwin Professional.Blackwell Science.
- AICAC. (1993). *Pitfalls or Probity – Tendering and Purchasing Case Studies*. Australia: Australian Independent Commission Against Corruption, 24 p.
- Black Henry Campbell (1979). *Black’s Law Dictionary*, 5th ed. St.Paul, MN; West Publishing Co. Stapenhurst.
- Construction Industry Development Board (2005) Code of Ethics For Contractors. Online at <http://www.cidb.gov.my/v6/?q=en/content/599>.
- China Daily, 2002. Guangzhou to Curb Corruption in the Construction Sector and Online: available at www.china.com.cn/english/China38347.htm.
- Doig, A. and Riley, S. (1998) Corruption and Anti-corruption Strategies : Issues and Case Study from Developing Countries. Online at <http://www.cip.org.mz/tools/corrupt>.
- For this distinction, see Gerald E. Caiden and Naomi J. Caiden, "Administrative Corruption," *Public Administration Review* 37(3, May/June 1977)'301-309
- Goldstock, R. (1990) *Corruption and Racketeering in the New York City*. NYU Press
- Journal of Economic Perspectives—Volume 19, Number 3—Summer 2005—Pages 19–42 S. Rajaratnam, "Bureaucracy versus Kleptocracy," in Heidenheimer, *Political Corruption*.

- Kolstad, I. and Wiig, A. (2011), Does democracy reduce corruption?, CMI Working Paper WP 2011:4, Bergen: Chr. Michelsen Institute
- KPMG Corruption (2004). Measuring Corruption in South Africa – Research Report on organizational ethics (KPMG/OPSSC/T-SA.2004.
- Krishnan, C. (2009) Combating Corruption in the Construction and Engineering Sector :The Role of transparency international. Leadership and management Engineering, July 2009. Online at <http://www.ascelibrary.org>.
- Leonard Chacha Mwita. 2007. Prenasalization and the IPA. UCLA Working Papers IN phonetics pp. 58-67.
- Levi, M. and Ruan, F. (1997). Corruption legislation and socio-economic changes in the People's Republic of China. *Journal of Financial Crime*, 4(2): 1–13.
- Luo, Y. (2004). An organizational perspective of corruption. *Management and Organization Review*, 1(1): 119–154.
- Mauro, Paolo, (1998). “Corruption: causes, consequences and agenda for further research”, IMF/World Bank, *Finance and Development*, 35(1): 13.
- "No Corruption in Singapore and China," *New Nation (Singapore)*, November 2, (1977), p. 4. For this distinction, see Gerald E. Caiden and Naomi J. Caiden, "Administrative Corruption," *Public Administration Review* 37(3, May/June 1977)'301-309
- Prof. Dr. Johann Graf Lambsdorff (2006). The Economic of Corruption - Lecture, University of Passau, Germany.
- Quah, J. S. T. (1988) Corruption in Asia With Special Reference to Singapore: Patterns And Consequences. Online at <http://jonstquah.com/images/Corruption%20in%20Singapore%20>
- Quah, J. S. T. (2004) Best Practices for Curbing Corruption in Asia. Online at <http://saatsaam.info/kh/images/Press/Corruption/d-83-en.pdf>.
- Rose-Ackerman, Susan. (1999). *Corruption and Government: Causes, Consequences, and Strategies for Reform*. Cambridge: Cambridge University Press.
- R. Johnston, Pelizzo (2006). The Role of Parliament in Curbing Corruption. Washington DC.

- Rabb, D.J. (1996), "*Ethics in Project Management: Issues, Practice, and Motive*", *Proceedings of the 2nd Annual Conference of the Project Management Institute, New Zealand Chapter Conference*, November, 14-15, Auckland, 145-157.
- S. Rajaratnam, "Bureaucracy versus Kleptocracy," in Heidenheimer, *Political Corruption*, p. 547. "No Corruption in Singapore and China," *New Nation (Singapore)*, November 2, 1977, p. 4.
- Sangweni, S. and Balia, D.(1999). *Fighting Corruption: Towards a National Integrity*; incorporating the report of the proceedings of the national anti-corruption summit held on 14-15 April 1999 in Parliament, Cape Town, Government Printer, and Pretoria.
- Shakantu W M.W. (2003). *Corruption in the construction industry: Forms, susceptibility and possible solutions*. CIDB 1st Postgraduate Conference 2003, Port Elizabeth. University of Cape Town. South Africa.
- Sigcau, S. (2000). *Speech at the Building and Drainage Control Conference 25th August*, Online: available at www.publicworks.gov/speeches accessed on 10 March 2008.
- Shen, L.Y. and Song, W.G. (1998). Competitive tendering practice in Chinese construction. *ASCE Journal of Construction Engineering and Management*, 124(2): 155–161.
- Stapenhurst, R. Johnston, Pelizzo (2006). *The Role of Parliament in Curbing Corruption*. Washington DC.
- Skweyiya Zola, (2004). *Speech at Social Improvement 28th October*, Online: at [www. SA.info/gov/speeches](http://www.SA.info/gov/speeches).
- Svensson, Jakob. (2003). "Who Must Pay Bribes and How Much?" *Quarterly Journal of Economics*. 118:1, pp.207–30.
- Szeftel, M. (1998). Misunderstanding African politics: Corruption and the governance agenda. *Review of African Political Economy*, 25(76): 221–240.
- Transparency International (2005). *Preventing Corruption on Construction project*. Online: www.transparency international.org/Preventing Corruption on Construction
- Transparency International organisation. (2007). *Corruption on construction projects* Online: <http://www.transparency org/Examples of Corruption on Construction>

- Treisman, D. (1998) *The Causes of Corruption : A Cross-National Study*. University of California, Los Angeles
- UK Transparency International (2006). Preventing Corruption On Construction Projects Risk Assessment And Proposed Action For Funders.
- Van Der Walt, B.J, Cornelis, W.A.S and Samuel, V. (1998). *Corruption*, Institute for Reformatory Studies. Potchefstroomse Universiteit.
- Vee, C. and Skitmore, M. (2003). *Professional Ethics in the Construction Industry*, Journal of Engineering, Construction and Architectural Management, 10(2), 117-127
- Wraith, R. and Simpkins, E. (1997). *Corruption in Developing Countries*, 6th Edition, Allen and Unwin, London.
- World Bank. (2006). *World Bank Sanctions Committee Procedures*. Online: <http://www.worldbank.org/html/opr/procure/sanctioncommittee.html>
- Zhou, I.M. (1998). China: The strategy of prevention against organized corruption. *Journal of Financial Crime – International*, 5(3): 1–5.
- Zou, P. X. W. (2006) Strategies for Minimizing Corruption in the Construction Industry in China. *Journal of Construction in Developing Countries*, Vol. 11, No. 2, 2006. Online at <http://www.usm.my/jcdc/input/JCDC/Patrick Zou>