

**THE EFFECTS OF GOOD CORPORATE GOVERNANCE AND FIRM'S
FINANCIAL CHARACTERISTICS ON TAX AVOIDANCE IN
MANUFACTURING COMPANIES**

(Case study: manufacturing companies listed in BEI year 2011-2016)

A THESIS

Presented as a Partial Fulfillment of the Requirements to obtain the Bachelor Degree
in Accounting Department



Presented by:

Annisa Amalina Wijayanti

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**INTERNATIONAL PROGRAM
FACULTY OF ECONOMICS
UNIVERSITAS ISLAM INDONESIA
YOGYAKARTA**

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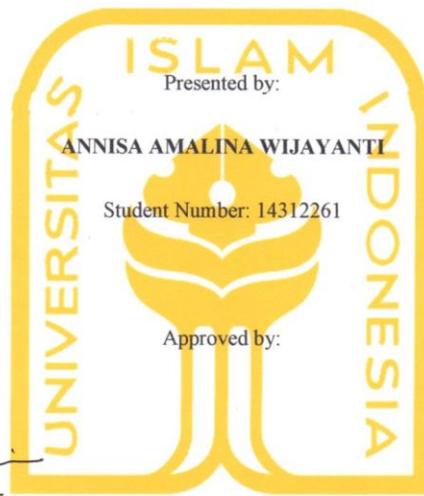
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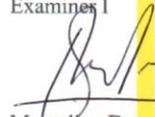
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DECLARATION OF AUTHENTICITY

Hereby I declare the originality of the thesis; I have not presented someone else's work to obtain my university degree, nor I have presented someone else's words, ideas or expressions without any of the acknowledgments. All quotations are cited and listed in the bibliography of the thesis. If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation or its consequence.

Yogyakarta, April 4th, 2018




Annisa Amalina Wijayanti

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ABSTRACT

The objective of this research is to analyze the effects of good corporate governance and firm's financial characteristics on tax avoidance. The proxy of good corporate governance are audit committee and audit quality, while the proxy of firm's financial characteristics are firm size, leverage, profitability, operating cash flow, and sales growth. The population in this research is manufacturing companies that listed in Indonesia Stock Exchange period 2011-2016. The research samples are selected using purposive sampling method. Total of samples are 26 companies from 147 manufacturing companies in Indonesia Stock Exchange period 2011-2016. This research uses multiple regression analysis. The research findings reveal that firm size and profitability variable have positive and significant effect on tax avoidance, while leverage variable has negative and significant effect on tax avoidance. On the other hand, audit committee, audit quality, operating cash flow, and sales growth variable have insignificant effect on tax avoidance.

Keywords: tax avoidance, audit committee, audit quality, firm size, leverage, profitability, operating cash flow, and sales growth.

ABSTRAK

Tujuan penelitian ini adalah untuk menganalisis efek dari good corporate governance dan karakteristik keuangan perusahaan terhadap penghindaran pajak. Proksi yang digunakan untuk good corporate governance adalah komite audit dan kualitas audit, sedangkan proksi yang digunakan untuk karakteristik keuangan perusahaan adalah ukuran perusahaan, leverage, profitability, operating cash flow, pertumbuhan penjualan. Populasi dalam penelitian ini adalah seluruh perusahaan manufaktur yang terdaftar dalam Bursa Efek Indonesia pada tahun 2011-2016. Sampel penelitian ini dipilih dengan menggunakan purposive sampling. Jumlah sampel adalah 26 perusahaan dari 147 perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia pada tahun 2011-2016. Penelitian ini menggunakan analisis regresi berganda, dengan hasil menunjukkan bahwa variabel ukuran perusahaan dan profitability berpengaruh positif dan signifikan terhadap penghindaran pajak sedangkan variable leverage berpengaruh negatif dan signifikan terhadap penghindaran pajak. Di sisi lain, variabel komite audit, kualitas audit, operating cash flow, dan pertumbuhan penjualan tidak berpengaruh signifikan terhadap penghindaran pajak.

Kata Kunci: *penghindaran pajak, komite audit, kualitas audit, ukuran perusahaan, leverage, profitability, operating cash flow, dan pertumbuhan penjualan.*

CHAPTER I

INTRODUCTION

1.1 Background of study

Indonesian Ministry of Finance stated that the largest source of national income comes from taxes. In the central government's 2017 State Budget (APBN 2017) income from taxes was about 1.495,8 trillion rupiah from the total of national income 1.736,2 trillion rupiah or 85.6 percent of the total national income. In the last five years, income from taxes has been the largest domestic revenues and will increase year to year. The revenue is then used for the country's development such as buildings, roads, bridges, and other public facilities. Therefore, the government wants an optimum increase of revenue from taxes, while a taxpayer always tries to pay indebted income tax as minimum as possible subject to the provision of tax laws.

Indonesia embraces a self-assessment system, by which taxpayers calculate, pay, and collect the indebted income taxes within the timeframe determined by tax laws (Suyapto & Lasmana, 2014). In this system, taxpayers must have self-awareness in terms of paying taxes. Taxpayers have full responsibility in this system, and fiscus only serve to oversee the implementation whether it is still in line with tax laws and regulations. The application of this tax system seems to provide an opportunity for taxpayers, in this case, to reduce the amount of tax to be paid by reducing the cost of the company, including tax burden.

Taxpayers will do anything to minimize the amount of taxes. Therefore, the need for a manager who is capable of implementing the company's preference-higher profits and less tax, is a must. A manager is said to be successful when he or she has succeeded in preparing tax planning. One of activities of tax planning is minimizing tax burden. There are a number of ways to minimize tax burden such as exemptions, deductions, tax incentives, income not object to tax, tax deferral, tax borne by the State to the cooperation with the tax authorities, bribe, and forgeries.

Tax planning is a process of organizing the business of a taxpayer or a group of taxpayers in such a way that its tax debt, either income tax or other tax, is in the lowest position, which is enabled by both the provisions of the tax laws and the commercial law (Zain, 2003). There are a number of ways of tax planning such as tax saving, tax avoidance but not tax evasion. The latter is a financial crime that will not be tolerated.

The definition of tax avoidance and tax evasion seems the same, but there is a different meaning between the two. According to Xynas (2011) the difference between the two is simple and clear. Zain (2003) stated that tax avoidance is an attempt to arrange an event in such a way as to minimize, eliminate, reduce, or decrease the tax burden within the provisions of the tax legislation. Meanwhile, based on Gravelle (2009) tax evasion is an illegal activity where a taxpayer avoids paying tax.

Companies may use a number of ways to shrink the amount of tax payable, following the tax regulation (tax avoidance) or minimizing tax value by taking actions against the tax law (tax evasion). The decision of a company to use tax avoidance or

tax evasion will give an impact on the company itself. The impact itself such as; the possibility of companies get penalties from tax authorities, the decline in stock prices, and bad reputation of the company due to audits of tax authorities. Therefore, a company needs an internal control to manage these significant risks in order to meet its business objectives. This is the point where corporate governance is of importance, as it can be an internal control that manages the company well.

Fujinuma in Effendi (2009) stated that Corporate Governance is a company's system of internal control, which is principally aimed at managing risks for the fulfilment of its business objectives, by safeguarding and enhancing the company's assets. There are two important components in a company that are required for the implementation of good corporate governance; they are the board of directors and the boards of commissioners. The former has a function to manage the company, while the latter has a function to oversight. Moreover, an independent commissioner serves as a countervailing force in decision making by the board of commissioners (Daniri, 2005). The board of commissioners is assisted by an independent commissioner. National committee for Good Corporate Governance provides guidelines for independent commissioners in public companies. The guidelines state that the commissioner is responsible and authorized to oversee the policies and actions of the board of directors, as well as to advise the directors if necessary. Thus, Good Corporate Governance requires full commitment from the board of directors and board of commissioners in order that the implementation can be in line with expectations.

Regarding the heavy responsibility of a commissioner, a commissioner may be assisted by several committees such as audit committee, remuneration committee, nomination committee, risk management committee, and others. In relation to audit committee, the board of commissioners establishes an audit committee to assist in supervising day-to-day operations of the company as well as in the process of preparing financial statements. Audit committee is a fundamental element of governance reforms across most of the developed companies (Armstrong, Guay, & Weber, 2010), as its function is to help commissioners to be their “eyes” and “ears” in terms of overseeing the company. The principles that should be the main basis of the audit committee in carrying out their duties are independence, transparency and disclosure, accountability, responsibility, and fairness.

In a company, the decision to assign external auditor should consider the opinion of audit committee. In this case, audit committee should assess audit reports from external auditors. Issues that can be communicated include significant audit adjustments, other information in documents containing audited financial statements, difficulties encountered in conducting audits. Thus, communication between the audit committee and the external auditor must go smoothly.

One becomes the focus of accounting quality and financial reporting is about the relationship between audit processes of corporate financial reporting with the outcome of accounting earnings manipulated by management. Therefore, external auditors are expected to eliminate bias or simply reduce misstatements and nonconformities in

financial reporting. A company must be selective in selecting external auditors, who have the potential to integrity of financial reporting. As for the auditor's selection guidelines and the scope of the auditor's performance are referred to the company's code of practice, applicable regulations, methods, and auditing guidelines based on applicable auditing standards (Warsono, Amalia, & Rahajeng, 2009). The more selective the election of an external auditor, it will provide a qualified auditor that will give a good result in audit quality.

The quality of audit can be achieved when an auditor has competence, independence. Competency consists of two things that are experience and knowledge. Independence means there is no relationship between the auditor and the client. The greater the public accounting firm, the more experienced and professional they are, which in turn will provide quality audit reports. It is known that quality audit reports reflect the true value of the company and less risk of fraud.

In managing a company, the board of directors hires employees with various characteristics and in accordance with the need for the company. In a big company, they will hire managers to assist in decision-making. Financial managers is one of the important aspects in the sustainability of the company, the function of financial managers is usually related to the one that has a high position in a company like vice director of finance or another financial officer. Vice director of finance will coordinate with activities of treasurers and controllers. A company needs a good controller and treasurer for sustainability of the company. The controller has a function to handle

about cost accounting and finance, tax payments, and management information system while treasurer has a responsibility for the corporate cash and credit management, financial planning, and capital expenditure. The results of the controller and treasurer functions will be poured into firm's financial characteristics.

There are several previous studies that conducted the issue of tax avoidance. In outside Indonesia a research was conducted by Kim and Im (2017) while in Indonesia the research was conducted by Maharani & Suardana (2014), Sukartha & Singly (2015), Dewinta & Setiawan (2015), Wijayanti & Rismawati (2017), Rinaldi & Cheisviyanny (2015), Eksandy (2017), Annisa & Kurniasih (2012) and Kurniasih & Sari (2013). These studies show that tax avoidance is affected by several factors and results. The present study is aimed at investigating further about the factors that affect taxpayers to do tax avoidance such as audit committee, audit quality, firm size, profitability, leverage, and sales growth by seeing the variance result from the prior studies.

Maharani & Suardana (2014), Annisa & Kurniasih (2012), Eksandy (2017) and Kurniasih & Sari (2013) stated that audit committee had a negative effect on tax avoidance, meanwhile based on Sukartha & Singly (2015) revealed audit committee had no significant influence on tax avoidance. In relation to audit quality, Eksandy (2017) found that audit quality had a positive effect on tax avoidance, Annisa & Kurniasih (2012) and Maharani & Suardana (2014) stated that audit quality had a

negative effect on tax avoidance and Kim & Im (2017) stated audit quality had no significant effect on tax avoidance.

Sukartha & Swingly (2015) and Dewinta & Setiawan (2015) stated that firm size had a positive effect on tax avoidance, while Kim & Im (2017) and Rinaldi & Cheisviyanny (2015) said firm size had a negative effect on tax avoidance. However, Kurniasih & Sari (2013) stated firm size had no significant effect on the tax avoidance. Profitability based on Kim & Im (2017), Dewinta & Setiawan (2015), and Rinaldi & Cheisviyanny (2015) had a positive effect from profitability on tax avoidance, while Wijayanti & Rismawati (2017) said profitability had a negative effect on tax avoidance. However, Kurniasih & Sari (2013) stated that profitability had no significant effect on tax avoidance.

Regarding leverage, Kim & Im (2017) and Kurniasih & Sari (2013) found that leverage had a positive effect on tax avoidance, while Sukartha & Swingly (2015) said leverage had a negative effect on tax avoidance. However, Wijayanti & Rismawati (2017) and Dewinta & Setiawan (2015) stated that leverage had no significant effect on tax avoidance. Sales growth based on Kim & Im (2017) and Dewinta & Setiawan (2015) had a positive effect on tax avoidance, while Sukartha & Swingly (2015) revealed that sales growth had a negative effect on tax avoidance.

The present study will replicate the research from Eksandy (2017) and Kim & Im (2017). It seems that the variables in their studies contain inconsistent results with another study, such as audit committee, audit quality, firm size, profitability, leverage,

and sales growth. In the meantime, research that investigate variable of operating cash flow is still rare in Indonesia. Thus, the present research combines the studies from Eksandy (2017) and Kim & Im (2017), by opting for independent variables from Eksandy (2017) as a proxy to good corporate governance such as audit committee and audit quality, and independent variables from Kim & Im (2017) as a proxy to firm's financial characteristics such as firm size, leverage, profitability, operating cash flow, and sales growth. The present study uses Cash Effective Tax Rates as a measurement of tax avoidance as in the study of Eksandy (2017). The difference between the two is the sample, the researcher uses a sample of manufacturing companies listed in Indonesia Stock Exchange in the period 2011-2016. Thus, this study is entitled "The Effects of Good Corporate Governance and Firm's Financial Characteristics Conducting Tax Avoidance in Manufacturing Companies".

1.2 Problem Formulation

1. Does audit committee have an effect on tax avoidance?
2. Does audit quality have an effect on tax avoidance?
3. Does firm size have an effect on tax avoidance?
4. Does leverage have an effect on tax avoidance?
5. Does profitability have an effect on tax avoidance?
6. Does operating cash flow have an effect on tax avoidance?
7. Does sales growth have an effect on tax avoidance?

1.3 Research Objectives

The purposes of the research are to:

1. analyze the effect of audit committee on tax avoidance.
2. analyze the effect of audit quality on tax avoidance.
3. analyze the effect of firm size on tax avoidance.
4. analyze the effect of leverage on tax avoidance.
5. analyze the effect of profitability on tax avoidance.
6. analyze the effect of operating cash flow on tax avoidance.
7. analyze the effect of sales growth on tax avoidance.

1.4 Research Contribution

This research provides benefits theoretically and practically. It would make a significant contribution to the field of accounting, especially tax avoidance. Specifically, it can be a reference for other researchers to conduct further studies related to tax.

Practically, the government and taxpayers may take advantage of the research findings. This research can provide additional information for regulators in decision-making related to taxation. It can also be a reference for taxpayers in decision-making.

1.5 Systematics of Writing

This study consists of five chapters, each of them has its own focus and purpose. The description of each chapter will be explained more as follows:

Chapter I: Introduction

This chapter describes background of study, problem formulation, research objectives, research contributions, and as well as the systematics of writing in this research.

Chapter II: Review of Related Literature

The second chapter describes the theoretical foundations needed to support the analysis and the theoretical review to discuss the problems formulated. It also contains the previous research, hypothesis formulation, and model of the study.

Chapter III: Research Method

The third chapter presents population and sample, sources and data collection method, research variables and measurement, and analysis technique.

Chapter IV: Data Analysis and Discussion

The fourth chapter shows the result of analyzed data by using statistical tools whether it fulfills the hypotheses or not with a further discussion of the statistical analysis result. This section presents research description, research findings, and discussion.

Chapter V: Conclusions and Recommendations

This chapter contains conclusions, research limitations, and recommendations for related research studies in the future.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Theoretical Review

2.1.1 Tax and Tax Law

Law no 28 year 2007 article 1 states that tax is a mandatory contribution to the state owed by individuals or body that enforceable under the Law, with not getting the rewards directly and used for the purposes of state for the greatest prosperity of the people. From the article, it can be concluded that tax is mandatory and implemented in accordance with legislation. Tax in the implementation has two functions, the first is budgeter that means as a source of funds for financing government expenditures and the second is regulate that means as a tool to arrange or implement policies in the social and economic fields.

Tax law is a collection of regulation that regulates the relationship between the government and taxpayers. Indonesia embraces a self-assessment system, it means the system gives full trust to taxpayers to calculate, pay, and collect the indebted income taxes within the timeframe determined by tax laws (Suyapto & Lasmana, 2014).

Self-assessment system requires taxpayers to have good strategies for the company. Strategies undertaken by taxpayers will be more optimal if they understand about:

1. the rights and obligations of taxpayers
2. time limit to pay and report the tax
3. income that includes as a tax object
4. income that does not include as a tax object
5. income that classified as a final income tax
6. cost that classified as a deductible expense
7. cost that classified as a non-deductible expense

Every taxpayer should pay tax payable in accordance with the laws of taxation. The intention to pay the lowest tax can be supported if the taxpayer can apply several methods that can help them to reduce the amount of tax. The methods are tax savings, tax avoidance, tax avoidance sanctions, tax payment delays, and tax credit optimization (Saptono, 2013). The hope is by using the methods, a taxpayer can optimize the expenses incurred for tax payment.

2.1.2 Tax Planning

Paying taxes is a mandatory for individuals and body, especially people or somebody who already become tax subjects. Companies want a minimum tax payment in order to raise the revenue they earn, while the government wants higher taxes. The intention to pay lower taxes requires the company to make tax planning.

Tax planning is an action done by taxpayers for maintaining their business properly in accordance with the tax regulations. The purpose of tax planning is to minimize the tax payable, both income tax and other taxes, as long as it is in accordance

with the provisions of the tax laws. Tax planning is an employment that implies not only knowledge of the provisions of tax laws and regulations, but also the provisions of other laws and regulations such as company law and some aspects of commercial law, as well as knowledge and understanding of accounting practices, business practices, and trade. It is permissible under the tax law as long as it is still in the tax avoidance scheme by taking into account the firm size, its business activities, and its ability to undertake tax planning (Noor, 2010). Therefore, if the company intends to reduce its tax payable, it would be better if they do tax planning from the beginning.

According to Zain (2003) , there are three main steps in doing tax planning, among others are:

1. Set the target or objective of doing tax management.
2. Make an identification support and inhibitors of the objective in the current situation.
3. Develop a plan or action device to achieve the goal.

In tax planning, there are a lot of processes, activities, or strategies that must be used by taxpayer, based on Lumbantoruan in Argatika (2017).

1. Tax Shifting is an action of transfer tax burden to other people or other parties besides the taxpayer himself so that the original taxpayer does not bear the tax.

2. Capitalization means the reduction of tax object's price equal to the amount that would be paid later by the buyer.
3. Transformation is a way to dodge the tax made by the manufacturer in a way to bear the tax charged to him.
4. Tax evasion is a tax dodging by violating tax regulation or tax law.
5. Tax avoidance is a tax dodging by following tax regulation or tax law.

If the company uses tax planning, the company can manage its tax expense by not making losses for the company itself and not violating the law. Usually, the company will use tax avoidance and tax evasion in its planning when doing tax management. It is known that a good company will use tax avoidance than tax evasion, as tax evasion is illegal.

2.1.3 Tax Avoidance

Tax planning is a process to manage the amount of tax in an efficient way before transferring to the government. In this case, a company usually does such activities as tax avoidance and not tax evasion. Tax avoidance and tax evasions are a process or strategies, or planning that a company uses to reduce its tax burden. Therefore, both of them sound the same, but in reality, they are different. Hanlon & S. (2010) defined tax avoidance as an attempt to make an explicit tax reduction while Lee, A., & S. (2015) explain that tax evasion indicates the company's efforts to reduce its tax liabilities through legal or illegal means.

In Zain (2003), there are many definitions of tax avoidance and tax evasion. Harry Graham Balter said tax evasion is the efforts made by the taxpayer (successfully or not) reduce or eliminate the tax burden in accordance with the prevailing provisions as a violation of the tax legislation, while tax avoidance is the same effort, which does not violate the provisions of the taxation legislation.

Ernest R. Mortenson said tax evasion is an unjustified effort with respect to the activities of the taxpayer to run or to avoid taxation, while tax avoidance is regulation of an effort in such a way as to minimize or eliminate the tax burden by observing the presence or absence of tax consequences. Therefore, tax avoidance does not constitute a violation of tax legislation or ethically considered false in the context of a taxpayer's undertakings to reduce, avoid, minimize, or alleviate the tax burden in ways permitted by tax law.

N. A. Barr, S. R. James, A. R. Prest said tax evasion is an illegal manipulation of income to minimize the amount of tax burden, while tax avoidance is a legal manipulation of income which is still in accordance with the provisions of the tax legislation to minimize the amount of tax burden.

Palan in Suryowati (2016) and Omer & Yetman (2007) mentions a transaction is indicated as tax avoidance when performing the following actions:

1. Taxpayers trying to pay tax less than it should be by utilizing the reasonableness of the interpretation of tax law.

2. Taxpayers seek to make taxes levied on declared profits and not on actual gains.
3. Taxpayers seek delays in tax payments.

In a body taxpayer, there is planning in the calculation of income taxes, like how to calculate body income tax correctly, postpone income, accelerate loading expense, optimize tax credits, monitor affiliate transactions, monitor interest rates and deposits, prepare nominative listings of entertainment expense, and prepare a nominative list of promotional expense.

According to Suandy (2011), there are a few factors that motivate taxpayers do tax avoidance, the factors include:

1. The amount of tax used to be paid by the taxpayer, the greater the tax to be paid, the greater the tendency of taxpayers to commit violations.
2. The cost used to bribe the tax authorities. The smaller the cost used to bribe the taxpayer, the greater the tendency of the taxpayer to commit violations.
3. The possibility to be detected, the less the possibility of violation is detected, the greater the tendency of taxpayer commits violations.
4. The sanctions, the lighter the sanctions imposed on violations, the greater the tendency of taxpayers to commit violations.

In every decision made by company's tax manager, that will have an impact on the company. If tax manager's decision is right and does not violate the rules, it will give a good impact on the company. Otherwise, if the tax manager makes a wrong

decision, it will give a negative impact on the company. The benefit occurs in the form of tax savings, in which the amount of cash becomes larger and enjoyed by owners or shareholders or for the operations of the company. The impact when tax manager makes a wrong decision, such as the possibility of getting penalties from tax authorities, the decline in stock prices of companies, and bad reputation of the company due to audits of tax authorities.

Measuring corporate tax avoidance can be done by effective tax rate (ETR), cash effective tax rate (CETR), and book-tax difference. ETR is used to measure tax aggressiveness as firms avoid corporate taxes by reducing their income before tax while maintaining financial accounting earnings in order to have a lower ETR score. The measurement of ETR is stated below:

$$\text{ETR} = \frac{\text{Income Tax}}{\text{Income Before Tax}}$$

CETR is a measure of tax avoidance by comparing tax payments with profit before tax. CETR is expected to be able to identify the aggressiveness of corporate tax planning that conducts using fixed differences as well as temporary differences. The measurement of CETR is stated below:

$$\text{CETR} = \frac{\text{Cash Tax Paid}}{\text{Pre Tax Income}}$$

Book-tax difference describes the difference between accounting profit and fiscal profit. The distinct difference between accounting earnings and taxable income in

companies generally shows aggressive behavior. The measurement of BTD is stated below:

$$\text{BTD} = \frac{(\text{Accounting Income} - \text{Taxable Income})}{\text{Total Assets}}$$

2.1.4 Agency Theory

Jensen and Meckling in Kurniasih and Sari (2013) stated that agency theory explains relationship between agent (manager) and principal (shareholder) as a contract under which one or more persons (principals) engage another person (agent) to perform some service on their behalf, which involves delegating some decisions making authority to the agent.

Principal delegates their business decision-making to agents who serve as a representative of the principal. Therefore, it is important for principals to give company management to the professionals-the ones who have a better understanding of operations business. Handing over the management of a company to the professionals is aimed to earn maximum profit with efficient costs for the prosperity of the principal.

Agency theory provides an overview of things that usually occur between agents and principals. One of the conflicts arising from the relationship between the two is that the agent does not always act and make decisions in accordance with the interests of the principal. Rather, the agent tends to act in the interests of the agent himself. Thus, managers tend to act self-interest, pursue their own personal goals, such as trying to gain the highest incentives. The conflict allows the principal to be extra careful in

controlling, overseeing the performance of managers, in order that managers keep acting in accordance with the principal's intention. For these, there will be expenses and costs that are borne by shareholders called agency costs. Agency cost is the cost arising from the conflict of interest between the manager (agent) and shareholder (principal) that potentially lead to agency cost, in Rachmithasari (2015) the cost are:

1. Costs arise because of the inefficiency from management caused by agents.
2. Monitoring costs are costs incurred by a company in relation to a lender requiring an evaluation of the progress of performance and use of the loan, including the cost of making periodic reports.
3. Bonding cost is the cost incurred by the agent to convince the shareholders that the manager is running properly.

Activities such as monitoring and bonding will cause the agent to be more directed in order to work in the interests of the principal, although on the other hand, the principal must sacrifice his wealth because of overseeing the performance of agents. Theory agency not only pays attention to principal and agent but also to other parties related to operations of companies such as governments, lenders, employees, top leaders, and the public.

The decision of managers in order to conduct tax avoidance activities is one of the agency issues. The relationship with the government is about taxes-the government prefers a higher amount of tax, while the management lowers it. To put it another way, management intends the company to generate high profits with a low tax burden. Thus,

the different viewpoint here is a cause of conflicts between tax authorities as tax collectors and corporate management as taxpayers.

2.1.5 Good Corporate Governance

Irawan in Sukartha & Swingly (2015) stated that corporate governance is a study that examines the relationships of directors, managers, employees, shareholders, customers, creditors, and suppliers to companies. The implementation of good and correct Corporate Governance will maintain a balance between the achievement of economic and community goals. Besides, it avoids the company from bad management that in turn has a bad impact on the company itself.

Corporate Governance is a process undertaken by the Board of Directors and the relevant Committee for the benefit of shareholders of the company and other stakeholders, providing direction, authority, and management. To put it simply, it is about how to balance the board members and the benefits of shareholders and other stakeholders.

In Indonesia generally adheres the system of a two-board system that is the Board of Commissioners and Board of Directors which have authority and responsibility clearly in line with their respective functions. The Board of Commissioners and the Board of Directors have the responsibility to maintain long-term sustainability of the company, so both parties must have a common perception of the company's vision, mission, and values.

In Indonesia, Good Corporate Governance Guidance is used as a foundation for companies to run their business in the long run with applicable business ethics, but it is not mandatory. In the GCG itself, there are some principles that leads the company to achieve sustainability, among others are:

1. Transparency

Transparency in the process of decision-making and disclosure are relevant material information. Information provided by the company is open to the stakeholders' interests. Therefore, it should be relevant and understandable, disclosed in a timely, adequate, clear, accurate, and comparable manner.

2. Disclosure

Disclosure is additional information or explanation of activities that attached to an entity's financial statements. The information in the disclosure is related to stakeholders, whether it is requested or not requested, about something related to operating performance, financial and business risks of the company.

3. Accountability

Companies must be confident that all the organs of the company and employees have the capability in accordance with their duties and responsibilities, moreover roles in the implementation of Good Corporate Governance. The clarity of function, operation, and responsibility for

management makes the company's operation more effective and economical.

4. Responsibility

Companies must comply with legislation and implement a responsibility to the society and the environment, so business continuity can be maintained in the long term and can be recognized as a good corporate citizen. The conformity of the management to laws and principles is needed for a good corporation.

5. Independence

To accelerate the implementation of good corporate governance principles, the company must be managed independently by each organ of the company, in which the domination over others is absent and each cannot be interfered by other parties. A situation in which a company is professionally managed is unlikely to generate conflict of interest and the influence or pressure of any party that is inconsistent with applicable laws and good corporate principles.

6. Fairness and Equality

The company must provide an opportunity for stakeholders to provide input and opinions in the interests of the company as well as open access to information in accordance with the principle of transparency within the scope of their respective capacities. Fairness and equity in fulfilling the

rights of stakeholders arise as a result of existing agreements and the regulations.

In the implementation of supervision conducted by the board of commissioners, generally four committees assist board of commissioners, they are:

1. Remuneration and Nomination Committee

The Remuneration Committee has the duty to evaluate the remuneration policy and provide recommendations to the Board of Commissioners regarding the remuneration policy for the Board of Commissioners and the Board of Directors to be submitted in the RUPS as well as the remuneration policy for the executive officer. Meanwhile, the Nomination Committee has the duty of preparing and providing recommendations on the system and procedures for the selection or replacement members of the Board of Commissioners and the Board of Directors to be submitted in the RUPS.

2. Risk Management Committee

The Risk Management Committee generally has the duty to assist the Board of Commissioners in overseeing the process of risk management that takes place in a company. The Risk Management Committee will evaluate the risk management policies and strategies set out by the Board of Directors that cover supervision by the Board of Directors: policy adequacy; procedures, limit setting, and adequacy of the identification process; measurement and risk management information system and comprehensive internal control.

3. Audit Committee

The Audit Committee is responsible for supporting and providing recommendations to the Board of Commissioners in supervision. Suryana (2005) stated that audit committee has a duty to assist the board of commissioners to monitor the financial reporting process by management and to improve the credibility of the financial statements. Some other tasks include reviewing accounting policies applied by companies, assessing internal controls, reviewing external reporting systems and regulatory compliance.

Effendi (2009) stated that one of the functions of the audit committee is to bridge shareholders and board of commissioners with control activities organized by management, internal auditors, and external auditors. In bridging the two parties, communication ability is needed by audit committee members in carrying out their duties such as communication with the board of commissioners, management, internal auditors, and external auditors. There are several things that need to be understood about the membership of the audit committee, based on Indriani & Nurkholis (2002):

1. Independence

Audit Committee must be independent or cannot influenced by the management of the company and other parties in carrying out its duties to realize credibility in the eyes of public and shareholders.

2. Competence

Competencies are related to an adequate understanding to be possessed by audit committee members including those attributes that support the execution of the audit committee's tasks, including unbelievability, curiosity, logical thinking, and the ability to analyze problems.

3. Commitment

Commitment includes awareness of responsibilities and professionalism in carrying out their duties.

4. Compensation

Audit committee members should be supported with adequate compensation packages to maintain independence, objectivity, and quality of work.

2.1.6 The Big Four-Accounting Firm

Financial statements are one source of financial information provided by a company to the public, especially investors and creditors. Internal and external parties use the information provided as a means of decision-making. Often there is a mistake in making financial statements either intentional or unintentional. The two most important characteristics that must be present in the financial statements are relevance and reliability. It is difficult to measure these characteristics in the financial statements so that the need for third-party services is the external auditor to guarantee the financial statements are relevant and reliable.

An external auditor is responsible for checking or auditing the published financial statements. Watkins et al (2004) have identified the definition of audit quality from several experts.

1. Audit quality is the market-value probability that the financial statements contain material errors and the auditor will find and report the fallacy of the material.
2. Audit quality is the probability that the auditor will not report an audit with an unqualified opinion for a material report containing material errors.
3. Audit quality is measured by the accuracy of information reported by the auditor.
4. Audit quality is determined by the audit's ability to reduce noise and bias and improve the purity of the accounting data.

When auditing, an auditor must have expertise that includes two elements of knowledge and experience. Often, to predict the quality of the audit, the work experience of an auditor is seen as an important factor in predicting the performance of public accountants. Large accounting firms (big four) are perceived to perform higher quality audits than small accounting firms (not big four). The relationship between accounting firm size and audit quality was described by Putri (2012) as follows:

1. The level of firm reputation. Large firms have more trusts to audit more accurately because they have relationships that are more specific with

clients. Thus, they will lose trust from the client, if they provide inaccurate reports.

2. The existence of a larger asset or wealth owned by a large accounting firm indicates the core of a large accounting firm power to produce more accurate audit reports than auditors with less wealth.
3. The power of a large accounting firm to produce the quality of audits is also reinforced by more qualified human resources than a small accounting firm.

A large accounting firm considers more credibility when receiving clients who have high risk. Meanwhile, a small accounting firm dares to accept clients who have a higher risk due to the motive of a long-term relationship.

The big four accounting firms are the largest group of professional and accounting firms that handle the majority of audit work for public and private companies. The four auditors are:

1. Price Waterhouse Coopers

Price Waterhouse Coopers (PWC) is the largest professional services office in the world among the other Big Four auditors. This office was formed in 1998, which originated from a business combination between Price Waterhouse and Coopers & Lybrand. The head office is located in London, England spread across 771 cities in 158 countries with 169,000 employees. The services provided by this company are:

- a. Audit and Attestation

- b. Tax
 - c. Advisory (Management Consulting)
2. Deloitte Touche Tohmatsu

Deloitte is one of the big four members which is in the second position when viewed on a revenue basis. Deloitte is a combination of several KAP, in 1952 merged with Haskin & Sells that formed Deloitte Haskin & Sells. In 1968, it was merged with Nobozu Tohmatsu to form Tohmatsu Awoki & Co. In 1975, it was merged into the Touche & Ross Network section. Until finally in 1989 Deloitte, Haskin & Sells were merged with Touche & Ross in the USA which gave birth to Deloitte Touche Tohmatsu. Deloitte is located in New York, USA and spread across 150 countries with 182,000 employees.

Services provided by Deloitte include:

- a. Audit & Enterprise Risk Service
 - b. Consulting for Enterprise Application & Technology
 - c. Financial Advisory
 - d. Tax
 - e. IFRS Specialist
3. Ernest & Young

Ernest & Young is one of the big four members which is in the third position when viewed on a revenue basis. Ernest & Young started in 1903, where Alwin C. Ernst and his brother Theodore formed Ernst & Ernst. In 1906, Arthur Young founded Arthur & Young Co. in 1924 the American company

formed an alliance with a company in England. On the American side, Young with Broads Peterson & Co. while on the English side is Ernst with Whinney Smith & Whinney. In 1989, Ernst & Whinney joined forces with Arthur Young to form a company called Ernst & Young. Ernst & Young is based in London, UK and now in 140 countries with 152,000 employees. Services provided by Ernst & Young include:

- a. Assurance Service
- b. Tax Service
- c. Advisory Service
- d. Transaction Advisory Service

4. KPMG

KPMG is one of the big four members which is in the fourth position based on income. The history of KPMG began in 1807, where William Barclay Peat formed the Public Accounting Firm, and in 1877, Thomson Mclintock built his company in Glasglow. In 1911, William Barclay Peat was merged with Marwick Mitchell & Co which gave birth to Peat Marwick. In 1979, Thomson Mclintock, Klynveld Kraayenhof & Co., and Deutsche Treuhandgesellschaft formed the KMG, which later in 1987 Peat Marwick was merged to form KPMG. KPMG is located in Amstelveen, Amsterdam with 145,000 employees. Services provided by KPMG include:

- a. Audit
- b. Tax

- c. Advisory
- d. Others (Global China Practice, IT risk advisory)

2.1.7 Firm's Financial Characteristics

Budiman (2012) stated that practice of tax avoidance by body taxpayers is through policies made by the head of the company. Factors such as firm size, profitability, leverage, operating cash flow and sales growth are likely to affect tax avoidance.

1. Firm Size

Machfoedz in Suwito and Herawati (2005) states that firm size is a scale that can be classified as group companies into large, medium, and small companies in various ways, one of which is firm size. Firm size can be seen through total assets owned by a company, stock market value, average sales rate, and the number of sales. A large-sized company has many advantages compared with small-sized one, they are:

- a. Company size can determine the level of ease of the company obtaining funds from the capital market.
- b. Company size determines bargaining power in financial contracts.
- c. There is the possibility of a scale effect in cost and returns making larger firms earn more profits.

2. Leverage

Leverage or solvability is used to measure how company's assets are financed by debt. This means how much debt burden is borne by the company compared to its assets. The use of leverage ratio for the company provides many benefits, either low or high ratio. The leverage ratio has the following implications:

- a. The creditor expects equity (funds provided by the owner) as a security margin, which means if the small fund is used as capital, the biggest business risk will be borne by the creditor.
- b. With the procurement of funds through debt, the owner benefits, in the form of retained control or control of the company.
- c. If the company earns more than the money it lends on the interest it pays, the return to the owner is magnified.

Companies that have high leverage ratios will have a greater risk of loss, but also have the opportunity to earn a large profit. Therefore, financial managers are required to manage the leverage ratio well so as to balance the high returns with the level of risk faced.

Debt to Total Asset Ratio (DAR) is one of the ratios used to measure the leverage rate of firms. This ratio is used to measure how company's assets are financed by total debt. This ratio is related to funding decisions where companies prefer debt financing rather than their own capital. Debts that

result in interest expense may be a deductible of taxable income, whereas dividends derived from retained earnings cannot be a deduction of profits.

3. Profitability

According to the Financial Accounting Standards (2009), indicators of company's performance especially profitability required to assess potential changes in the economic resources may be controlled in the future. Profitability is one measure of the performance of a company. It shows the ability of a company in generating profit over a certain period at a certain level of sales, assets and capital stock (Dewinta & Setiawan, 2015). It consists of several ratios, one of that is a return on assets (ROA). ROA serves to measure the effectiveness of the company in the use of resources it has (Siahaan, 2004).

ROA is used to measure the net profits derived from how a company uses assets. The higher ROA means the better company's performance in managing its assets to gain profit. When profits are gained, the amount of income tax will decrease the company's tendency to tax avoidance because we assumed the company do tax planning. However, profitability ratios are not only beneficial to the business owner or management, but also to outside parties, especially those who have relationships or interests with the company. The purpose of using profitability ratio is also for outsiders. According to Kasmir (2008) are:

- a. To measure or calculate profits earned by a company in a certain period.
- b. To assess the company's profit position in the previous year and the current year.
- c. To assess the progress of profits from time to time.
- d. To assess the amount of net profit after tax with own capital.
- e. To measure the productivity of all corporate funds used as either loan capital or own capital.
- f. To measure the productivity of all corporate funds used as either own capital.

Meanwhile, the benefits obtained are to:

- a. know the level of profit earned by a company in one period.
 - b. know the company's profit position in the previous year and the current year.
 - c. know the development of profit over time.
 - d. know the amount of net profit after tax with own capital.
 - e. know the productivity of all corporate funds used either loan capital or own capital.
4. Operating cash flow

Cash flow statement is a financial statement showing the sources of cash and cash use that enter or exit in a business. Meanwhile, cash flow statement analysis is an economic analysis method that includes positive cash

movements (in cash flow) and negative cash movements (out cash flow) caused by corporate activities to determine the relative needs of the activities. Statement of cash flows classified into three activities is defined as follows:

a. Operating activities

Operating cash flow is the amount of cash generated from operating activities. An indicator determines whether a company's operations can generate sufficient cash to repay loan, maintain operating capability of the company, pay dividends, and make new investments without relying on external sources of funding. Examples of cash flows from operating activities are:

- 1) Cash receipts from the sale of goods and services.
- 2) Cash receipts from royalties, fees, commissions and other income.
- 3) Cash payments to suppliers of goods and services.
- 4) Cash payments to employees.
- 5) Cash receipts and payments by insurance companies in respect of premiums, claims, annuities and other insurance benefits.
- 6) Cash payment or income tax refund unless it can be specifically identified as part of the financing and investing activities.
- 7) Cash receipts and payments from contracts held for the purpose of business and trade transactions.

b. Investing activities

It is the separate disclosure of cash flows from investing activities is necessary because cash flow reflects cash receipts and disbursements in relation to resources intended to generate future income and cash flows.

Examples of cash flows from investing activities are:

- 1) Cash payments to purchase fixed assets, intangible assets, and other long-term assets.
- 2) Cash receipts from the sale of land, buildings, equipment, intangible assets and other long-term assets.
- 3) Acquisition of shares or other company's financial instruments.
- 4) Advances on loans granted to other parties and repayment.
- 5) Cash payments in respect of futures contracts, forward contracts, option contracts, and swap contracts.

c. Financing activities

Financing cash flow is an activity that results in changes in the amount and composition of capital and corporate loans.

Inside the company, the flow of business operations movements generally can be seen by its operating cash flow. Operating cash flow indicates whether a company is able to generate sufficient positive cash flow to maintain and grow its operations. If operating cash flow is unable to maintain the company's operations, external financing is required for capital expansion. Operating cash flow represents the cash version of a company's

net income. By seeing operating cash flow, companies can easily take tax avoidance action by exploiting gaps in transactions.

5. Sales growth

Sales have an influence on a company's profit because the company can predict profits to be gained with the amount of sales growth. The increasing sales growth allows the company to further increase its operating capacity for improving the company's value. The bigger the firm size, it indicates there are numerous transactions in terms of sales. Furthermore, if the volume of sales is high, it indicates a lot of cash in the operational company. Increased sales growth will tend to make the company get a large profit, which in turn will tend to practice tax avoidance.

2.2 Previous Research

There are a number of previous researchers, that have investigated about tax avoidance. Many variables were studied as independent variables such as firm size and leverage by Kim & Im (2017); Sukartha & Singly (2015); Dewinta & Setiawan (2015); Kurniasih & Sari (2013), audit quality and profitability by Kim & Im (2017); Maharani & Suardana (2014), audit committee and sales growth by Sukartha & Singly (2015), and the last operating cash flow by Kim & Im (2017).

Kim & Im (2017) examined small and medium-sized entities firm listed on Korea Stock Exchange during period 2011 – 2013. The independent variables were the firm size, leverage, capital intensity, profitability, operating cash flow, sales growth, R&D

intensity, export rate, auditor size, and auditor's findings. The research used regression analysis for data analysis. The result showed that profitability, leverage, operating cash flow, capital intensity, R&D intensity, and sales growth partially had a positive effect on corporate tax avoidance. However, the export ratio, auditor's findings, and auditor size partially had no effect on corporate tax avoidance. In the meantime, firm size had a significant negative effect on corporate tax avoidance.

Sukartha & Swingly (2015) studied manufacturing companies listed on Indonesia Stock Exchange during period 2011 – 2013. The independent variables were executive characters, audit committee, firm size, leverage and sales growth. The research used multiple linear regression for data analysis. The result showed that the executive character and firm size partially had a positive effect on tax avoidance, while leverage had a negative effect on tax avoidance. The variable audit committee and sales growth partially had no significant effect on tax avoidance.

Dewinta & Setiawan (2015) studied manufacturing companies listed on Indonesia Stock Exchange during period 2011-2014. The independent variables were firm size, the age of the company, leverage and sales growth. The research used multiple linear regression for data analysis. The result showed firm size, company age, profitability, and sales growth partially had a positive effects on tax avoidance while leverage had no significant effect on tax avoidance.

Kurniasih & Sari (2013) studied manufacturing companies listed on Indonesia Stock Exchange during period 2007-2010. The independent variables were ROA,

leverage, corporate governance, firm size, and fiscal loss compensation. The research used multiple linear regression for data analysis. The result showed corporate governance and leverage had no significant effect on tax avoidance while ROA, firm size, and fiscal loss compensation partially had a negative significant effect on tax avoidance.

Maharani & Suardana (2014) studied manufacturing companies listed on Indonesia Stock Exchange in the period 2008 – 2012. The independent variables were institutional ownership, the proportion of board of commissioners, audit quality, audit committee, profitability, and corporate risk. The research used multiple linear regression for data analysis. The result showed that the proportion of board of commissioners, audit quality, audit committee, and profitability partially had a negative effect on tax avoidance. Corporate risk had a positive effect on tax avoidance while institutional ownership had no significant effect on tax avoidance.

Wijayanti & Rismawati (2017) examined companies in Jakarta Islamic index in the period 2010 – 2013. The independent variables were profitability, liquidity, leverage, CSR while the dependent variable was aggressiveness tax. The research used multiple linear regression for data analysis. The result showed that liquidity and profitability partially had a negative significant effect on corporate tax aggressiveness while leverage and CSR had a positive significant effect on corporate tax aggressiveness.

Rinaldi & Cheisviyanny (2015) examined manufacturing companies listed on Indonesia Stock Exchange in the period 2010 - 2013. The independent variables were profitability, firm size, and fiscal lost compensation. The research used multiple linear regression for data analysis. The results showed profitability partially had a positive significant effect on tax avoidance while firm size partially had a negative significant effect on tax avoidance. Fiscal lost compensation had no significant effect on tax avoidance.

Eksandy (2017) studied consumer goods industry sector in the period 2010-2014. The independent variables were independent commissioners, audit committee, and audit quality. The research used multiple linear regression for data analysis. The results showed that independent commissioners and audit quality partially had a positive effect on tax avoidance, while audit committee had a negative effect on tax avoidance.

Annisa & Kurniasih (2012) examined publicly traded companies listed on the Indonesia Stock Exchange in 2008. The independent variables were institutional ownership, the board of commissioners, independent commissioners, audit committee, and audit quality. The research used multiple linear regression for data analysis. The result showed institutional ownership and independent commissioners partially had a negative significant effect on tax avoidance, meanwhile the boards of commissioners, audit committee, and audit quality had a positive significant effect on tax avoidance.

2.3 Hypothesis Formulation

2.3.1 Effect of audit committee on tax avoidance

Good Corporate Governance will not be created successfully and only be a concept without any supervisory action undertaken by the board of commissioners. The supervisory conduct here requires the role of audit committee. The board of commissioners establishes an audit committee to assist in supervising day-to-day operations of a company and a process of preparing financial statements. The audit committee will provide incentives for management to undertake sound business management through the supervisory role undertaken. Thus, it will encourage a company to fulfill the principles of good corporate governance consisting of fairness, responsibility, accountability, transparency, independence, and disclosure.

The audit committee is one form of the application agency cost concepts in agency theory. It is formed for monitoring, that is assisting the principle of monitoring the performance of agents to stay in line. In addition, the task of the audit committee includes reviewing the accounting policies applied by the company, assessing internal controls, reviewing external reporting systems and regulatory compliance. In performing its duties, the audit committee will conduct formal communication, with the boards, management, internal auditors, and external auditors. In supporting its work, the audit committee should have such things as independence, competence, commitment, compensation. With the audit

committee, it is expected the management minimize to conduct frauds that will harm the company, and also minimize tax avoidance undertaken by the management.

Daniri (2005) stated that since Good Corporate Governance (GCG) as a recommendation at the Indonesia Stock Exchange in 2000, the audit committee has become a common component in corporate governance structure in public companies. In the regulations issued by the Indonesian Stock Exchange, the audit committee shall be at least 3 persons with 1 independent commissioner and 2 persons from outside the company. If in a company the audit committee does not follow the rules, it will likely lead to management's actions in minimizing profits for tax purposes.

The explanation above is supported by a research conducted by Maharani & Suardana (2014), and Eksandy (2017) revealing that audit committee had a negative influence on the tax avoidance.

Based on the discussion above, a hypothesis is proposed as follows:

H1: Audit committee has a negative effect on tax avoidance

2.3.2 Effect of audit quality on tax avoidance

Financial statements are one source of financial information provided by a company to the public. Often there is a mistake in making financial statements either intentional or unintentional. The two most important characteristics that

must exist in the financial statements are relevance and reliability. The services required from third party is an auditor aimed to provide assurance whether the financial statements are relevant and reliable. The purpose of auditing performed by an auditor is to provide a quality result.

There are several definitions of audit quality itself, one of which is a measure of the accuracy of information reported by an auditor. An auditor itself in conducting auditing is required to have two elements-knowledge, and experience. Often, times to predict the quality of audit, the work experience of an auditor is seen as an important factor in predicting the performance of public accountants. Large accounting firms (big four) are perceived to perform better quality audits than small ones (not big four). To put it another way, larger-sized accounting firms have good reputation, wealth, human resources and the credibility to perform better quality audits.

In addition, one factor that determines the quality of audit is transparency. It is an important element in audits because it implies an accurate disclosure. Guedhami, Pittman, & Saffar (2014) found that firms that belong to Big 4 accounting firm showed higher earnings management to provide greater transparency, higher valuation, and cheaper equity funding. Therefore, companies audited by the Big Four accounting firms such as Price Waterhouse Coopers (PWC), Deloitte Touche Tohmatsu, KPMG, Ernst & Young (E & Y) are considered having fewer fraud levels than firms audited with KAP other than

the Big Four. The Big Four are considered to produce better audit quality which in turn to be able to arise trusts for the financial statements that lead to less tax avoidance.

The explanation above is supported by a research conducted by Maharani & Suardana (2014) that revealed audit quality had a negative influence on tax avoidance.

Based on the discussion above, a hypothesis is proposed:

H2: Audit quality has a negative effect on the tax avoidance.

2.3.3 Effect of firm size on tax avoidance

Company size can be interpreted as a comparison of the size or size of a company or organization. Some common factors used to determine company size include a number of employees, stock market value, selling rate, total debt, and total assets. Other factors that also affect the company size are its human resources, such as more experienced directors, competent employees, and more specialized work system.

Firm size is a group of companies, including large companies, medium, and small. Large companies have many advantages over smaller companies. The first advantage is firm size can determine the level of ease of the company obtaining funds from the capital market. The second is firm size determines the bargaining

power in financial contracts, and the third is the possibility of the effect of cost and return that make larger companies earn more profits.

Firm size is shown through logs of total asset. Firms with large total assets tend to be more capable and stable to generate profits when compared to firms with small total assets. The greater the profit generated, the greater the size of the company. Companies with large profits will consider more risk in managing tax burden.

The firm that belongs to large firm tends to have more resources than smaller firms to manage taxes. Human resources who are experts in taxation are required to manage corporate taxes in order to minimize corporate tax burden. The larger the number of human resources in a large company, especially in the division of taxation, the greater the tendency of company's tax avoidance.

The explanation above is supported by a research conducted by Sukartha & Swingly (2015) and Dewinta & Setiawan (2015) revealed firm size had a negative influence on tax avoidance.

Based on the discussion above, a hypothesis is proposed as follows:

H3: Firm size has a positive effect on the tax avoidance

2.3.4 Effect of Leverage on tax avoidance

Leverage describes the relationship between total assets and ordinary share capital or shows the use of debt to increase profit (Husnan & Pudjiastuti, 2002).

A company has two sources of funding: internal and external. Internal funds are the result of the company's operations in the form of retained earnings, while external funds are usually obtained from debt.

External funds are needed if the management feels that the use of internal funds is insufficient to finance the company's needs. Companies are allowed to use debt to fulfill their operational and investment needs. However, the debt will result in a fixed rate of return called interest. The bigger the debt, the smaller the taxable profit because the tax incentives on the debt interest are greater. It indicates the increased use of debt by companies.

Debt to Total Asset Ratio (DAR) is one of the ratios used to measure the leverage rate of firms in which it is used to measure how company's assets are financed by total debt. This ratio is related to funding decisions in which companies prefer debt financing to their own capital. The higher the value of the leverage ratio, the higher the funding coming from the third party such as debt used by the company and it result in higher interest burden. Debts that result in interest expense may be a deductible of taxable income, whereas dividends derived from retained earnings cannot be a deduction of profits. Noor (2010) which explains that companies with more debt has a good tax rate, this means that with the amount of debt that much, companies to do tax avoidance will tend to be lower.

The explanation above is supported by a research by Dewinta & Setiawan (2015), Sukartha & Swingly (2015) and Kurniasih & Sari (2013) stated leverage had a negative influence on tax avoidance.

Based on the explanation above, a hypothesis is proposed as follows:

H4: Leverage has a negative effect on the tax avoidance

2.3.5 Effect of profitability on tax avoidance

Profitability measures the overall effectiveness of management directed by the size of profits gained in relation to sales or investment. The better the profitability ratio, the better the ability to capture high profits. One of the ratios used to measure profitability is a return on assets (ROA). ROA is the ratio of net profit after tax to total assets overall, this ratio is a measure to assess how much the return (%) of assets owned. If the ratio of ROA is negative, it indicates the company suffers from losses.

ROA measures the ability of a company to generate profits in the past to then be projected in the future, and therefore the higher the company's profit the better the management of the company's assets, which leads to smoothness in tax payments. In agency theory, agents will spur to increase corporate profits, when profits are large, the amount of income tax will increase in accordance with the increase in corporate profits. After that, it will enable the efforts of the company to conduct tax avoidance.

The explanation above is supported by a research by Kim & Im (2017), Dewinta & Setiawan (2015), and Rinaldi & Cheisviyanny (2015) revealing that profitability had a positive influence on tax avoidance.

Based on the explanation above, a hypothesis is proposed as follows:

H5: Profitability has a positive effect on the tax avoidance

2.3.6 Effect of operating cash flow on tax avoidance

Cash flow statement is a financial statement showing the sources of cash and cash use that enter or exit in a business. It is classified into three activities namely operating, investing, and financing. Operating cash flow is a measure of the amount of cash generated by a company's normal business operations. Operating cash flow indicates whether a company is able to generate sufficient positive cash flow to maintain and grow its operations, if operating cash flow is unable to maintain the company's operation, external financing is required for capital expansion. The persistence of earnings will increase if the components of operating cash flow are increasing. The condition that makes the operating cash flow is referred to as a proxy for the quality of earnings, which will strengthen over the higher operating cash flow to earnings (Dewi & Putri, 2015).

Weygandt, Kimmel, & Kieso (2010) stated that cash flows from operating activities are operating cash flows covering the effect of cash from transactions generating revenues and expenses, then included in the determination of net

income. Financial analysts sometimes prefer to see cash flow metrics because they strip away certain accounting effects and think to provide a clearer picture of the current reality of the business operation, also can help investors to see the company's ability to provide investment opportunity in the future.

One example of the activities of operating cash flow is cash payments or income tax returns, as well as payments and other cash income. The greater the cash value owned by the company, the greater the profit generated which in turn lead to tax avoidance.

The explanation above is supported by a research by Kim & Im (2017) that stated operating cash flow had a positive influence on tax avoidance.

Based on the explanation above, a hypothesis is proposed as follows:

H6: Operating cash flow has a positive effect on the tax avoidance

2.3.7 Effect of sales growth on tax avoidance

Sales have an influence on the strategies of the company because assets must support sales. If sales increase, the company must add its assets. Companies can best optimize existing resources by seeing volume of sales from the previous year. Sales growth is the increase in the number of sales from year to year. With the increase, it indicates the leadership of the company has been trying to maximize the value of the company, which is the task of an agent against the principal in agency theory.

The increasing sales growth allows a company to increase its operating capacity because increasing sales growth, the company will gain an increased profit as well. The company can predict profits gained by large sales growth. Sales growth shows the company's sales growth every year. Because of increased sales, it will make companies add their assets. In an effort to increase its assets, the company tends to practice tax avoidance as increased profits means increased tax burden.

The explanation above is supported by a research by Kim & Im (2017) and Dewinta & Setiawan (2015) revealed sales growth had a positive influence on tax avoidance.

Based on the explanation above, a hypothesis is proposed as follows:

H7: Sales growth has a positive effect on tax avoidance

2.4 Research Model

Based on the theoretical review, previous research, and hypothesis, the research model can be drawn in the figure 1 below:

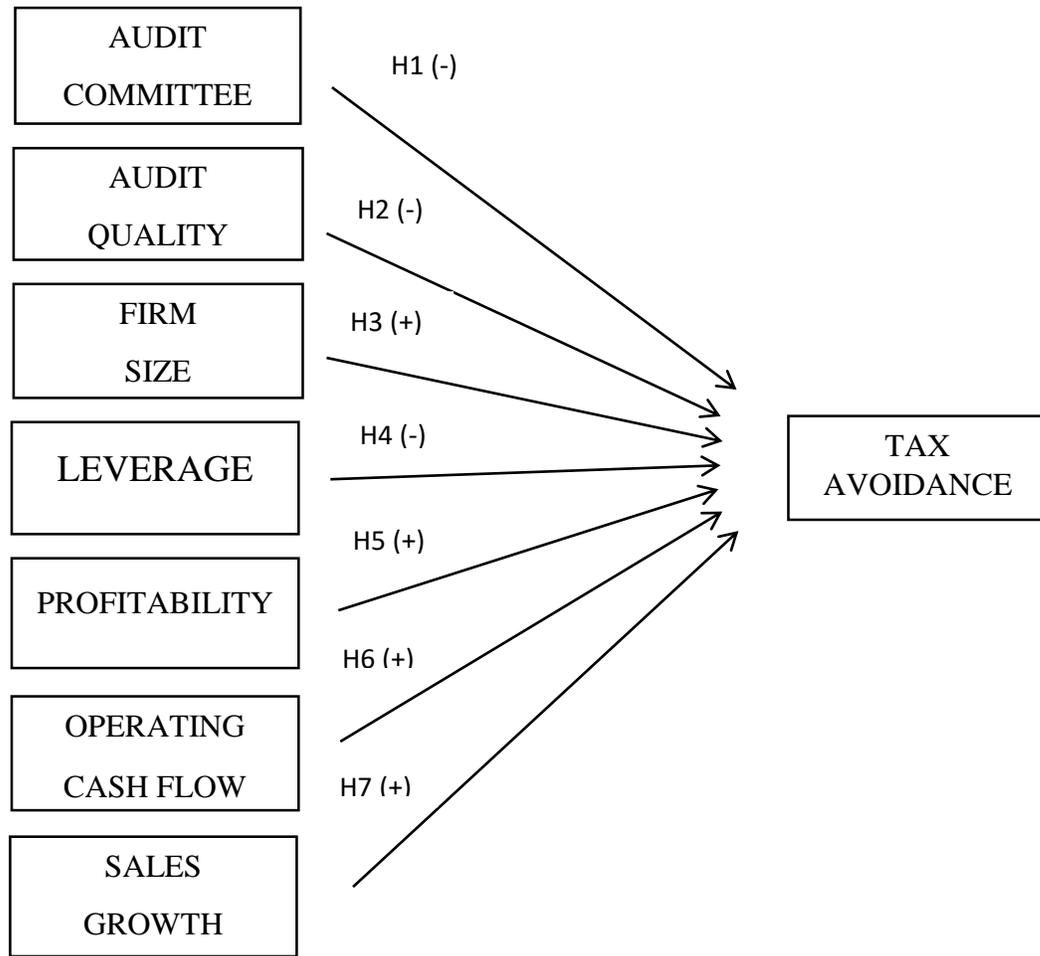


Figure 2.1 Research Model

CHAPTER III

RESEARCH METHOD

3.1 Population and Sample

The populations in this research are all manufacturing companies listed in Indonesia Stock Exchange (IDX) for the period of 2011-2016. The researcher uses purposive sampling technique to get a sample. The chosen sample has met the following criteria:

1. All manufacturing companies are listed in Indonesian Stock Exchange and consistently published their annual report per December 31 for the period of 2011-2016.
2. Manufacturing companies use Rupiah Currency in their financial statements.
3. Manufacturing companies, which did not suffer losses or gain negative profit within the period 2011-2016.

3.2 Sources and Data Collection Method

Data collection method in this research is using documents research method or known as documentary analysis, which involves the study of existing documents (Walliman, 2017). The type of data used in this study is secondary data in the form of Annual Report of Manufacturing Companies listed on Indonesia Stock Exchange (IDX) in the period 2011-2016.

This research data was obtained from the Annual Reports of Manufacturing Companies listed in Indonesia Stock Exchange (IDX), www.idx.co.id, and Pojok BEI Fakultas Ekonomi Universitas Islam Indonesia.

The researchers obtain the required data using documentation that is the activity of data collection conducted through document tracking (Widodo, 2017). The data include company profile, annual financial statements, and notes to financial statements.

3.3 Research Variables

The variables of this research are dependent and independent variables. The dependent variable is tax avoidance while the independent variables are good corporate governance and firm's financial characteristics. Good corporate governance uses proxy by audit committee and audit quality while financial characteristics uses proxy by firm size, leverage, profitability, operating cash flow, and sales growth.

3.3.1 Tax Avoidance

Tax avoidance is an attempt to organize tax planning in such as to minimize, eliminate, reduce, or decrease tax burden within the provisions of tax legislation. This research uses Cash Effective Tax Rate (CETR) as a basis to measure tax avoidance. The formula of CETR can identify the aggressiveness of tax planning done by the company, the higher the number of CETR the lower the tax avoidance conducted by the company. The formula of CETR (Eksandy, 2017) can be seen below:

$$\text{CETR} = \frac{\text{Cash Tax Paid}}{\text{Pre Tax Income}}$$

3.3.2 Audit Committee

Audit committee is a committee made by the board of commissioners to assist in supervising day-to-day operations of a company as well as in process of preparing financial statements. Audit committee has a function to help commissioners to be their “eyes” and “ears” in terms of overseeing the company.

The formula of audit committee (Eksandy, 2017) can be seen below:

Audit committee = the total number of audit committee

3.3.3 Audit Quality

Audit quality is the result in which an auditor performs an audit by complying with the requirements or auditing standards. Auditing standards include professional quality, independent auditor, judgment used in audit execution and preparation of audit report that is generally done by big accounting firm like the big four. The big four accounting firms among others are Price Waterhouse Coopers (PWC), Deloitte Touche Tohmatsu, KPMG, Ernst & Young (E&Y). The formula of audit quality (Eksandy, 2017) can be seen below:

Audit quality = gives 1 if the auditor firm is the big four, and 0 if not the big four.

3.3.4 Firm size

Firm size is a scale that can be classified into large, medium, and small companies in various ways. In this research, firm size is measured by how much assets the company has. Therefore, Kim & Im (2017) provides the proxy used to determine the firm size as follows:

$$\text{Firm size} = \log(\text{total assets})$$

3.3.5 Leverage

Leverage is a ratio that measures the ability of both long-term and short-term debt used to finance a company's activities. In this research, leverage uses debt to total asset ratio (DAR), it is one of the ratios used to measure how company's assets are financed by total debt. The proxy used to measure the leverage based on Kim & Im (2017) is:

$$\text{Leverage} = \frac{\text{Total Liabilities}}{\text{Total assets}}$$

3.3.6 Profitability

Profitability is an indicator of company's performance that shows the ability of a company in generating profit over a certain period at a certain level of sales, assets, and capital stock. One of the ratios is ROA, the ratio measures net profits derived from how the company uses assets. The higher the value of ROA, the greater the profit earned by the company. The proxy based on Kim & Im (2017) to calculate profitability is ROA with the following formula:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

3.3.7 Operating Cash Flow

Operating cash flow is a cash inflow and outflow generated from operating activities. Operating cash flows concentrate on cash inflows and outflows related to a company's main business activities. If there is a good cash flow in operating their business, the company will maintain their daily operation in related company's main business activities such as paying taxes. Based on Kim & Im (2017) proxy used to measure operating cash flow is:

$$\text{Operating Cash Flow} = \frac{\text{Net Operating cash flow}}{\text{Total Assets}}$$

3.3.8 Sales growth

Sales growth refers to the increased sales and services revenue between the current and previous year in percentage (Carvalho & Costa, 2014). For companies with high level of sales growth and high profits have a tendency to make tax avoidance. Based on Kim & Im (2017) sales growth is measured by:

$$\text{Sales Growth} = \frac{(\text{sales during current term} - \text{sales during previous term})}{\text{sales during previous term}}$$

3.4 Analysis Technique

Data that had been collected in this research was processed by SPSS program version 24.0 and the analysis techniques used are descriptive statistics, classical assumption test, and multiple linear regression.

3.4.1 Descriptive statistic

The descriptive statistical analysis is the analysis used to know the characteristics of the sample used and describe the variables in the study. Descriptive statistics processes the data into statistical information such as mean, median, standard deviation, skewness, kurtosis, and others.

3.4.2 Classical Assumptions Test

Classical assumption test is a test used to test the feasibility of the regression model in order to achieve a good data and generate a good model. This test is performed in order to be able to determine the feasibility of the model. There are four testing of classical assumption: normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test.

1. Normality Test

Normality test is used to test whether in the regression model, the dependent variable and the independent variable have a normal distribution or not. Normality test can be seen by using one sample Kolmogorov – Smirnov test. The data is normally distributed when the residual value has a significant level more than 0.05. That means the regression model has fulfilled the normality assumption.

2. Multicollinearity Test

Multicollinearity test is used to test whether it is founded a correlation between independent variables that results in a high correlation in the

regression model. Good regression model should not have a correlation between independent variables because it will not be orthogonal or resemblance. The research data should have an orthogonal variable, it means that the variable has zero value between independent variables (Ghozali, 2012). Detecting the presence of multicollinearity in a regression model can be seen from the tolerance value and the opposite is the variance inflation factor (VIF). Tolerance measures the variability of the selected independent variable that is not explained by other independent variables. The cutoff value used to indicate a multicollinearity factor is a tolerance value > 0.10 or equal to $VIF < 10$ (Ghozali, 2012).

3. Autocorrelation Test

Autocorrelation test is used to test whether it is found a correlation between the period (t) and the previous period (t-1) in the regression model. Autocorrelation examines whether there is an autocorrelation in the model using Durbin-Watson statistic test. The autocorrelation test model is depicted as follows:

Table 3.1 Autocorrelation Test

Hypothesis null	Decision	The condition
No positive autocorrelation	Reject	$0 < d < dl$
Positive autocorrelation	No decision taken	$dl \leq d \leq du$
No negative autocorrelation	Reject	$4 - dl < d < 4$
Negative autocorrelation	No decision taken	$4 - du \leq d \leq 4 - dl$
No negative or positive autocorrelation	Not rejected	$du < d < 4 - du$

4. Heteroscedasticity Test

Heteroscedasticity test is used to test whether in variance it is found the inequality of variance from residual one observation to another observation. Good regression model should be free from heteroscedasticity problem. Several ways to detect the presence of heteroscedasticity, one of which is by seeing the Plot graph between the predicted dependent variable which is ZPRED, with the residual SRESID or commonly known as Scatterplot graph. To put it simply, the detection of the heteroscedasticity can be done by checking the existence of specific patterns on the scatterplot (Ghozali, 2012). If there is no clear pattern, and the points are spread above and below the number 0 on the Y-axis, there is no heteroscedasticity.

3.4.3 Multiple Linear Regression

Multiple linear regression analysis is used to measure the strength of the influence of independent variables on the dependent variable, which consists of determination coefficient test (R²), simultaneous test (f), and partial test (t). Multiple linear regression is used to analyze the obtained data and to test the hypotheses because this study has some independent variables. This research uses multiple linear regression to test the effect of seven independent variables such as audit committee, audit quality, firm size, profitability, leverage, operating cash flow, and sales growth against the dependent variable tax avoidance. The models used are as follows:

$$\text{CETR} = \alpha + \beta_1\text{AC} + \beta_2\text{AQ} - \beta_3\text{SIZE} + \beta_4\text{LEV} - \beta_5\text{PROF} - \beta_6\text{OCF} - \beta_7\text{SG} + e$$

Information:

CETR	=	Cash Effective Tax Rate
AC	=	Audit Committee
AQ	=	Audit Quality
SIZE	=	Firm size
LEV	=	Leverage
PROF	=	Profitability
OCF	=	Operating Cash Flow
SG	=	Sales Growth
α	=	Constant Value
$\beta_1 - \beta_7$	=	Independent Variables Regression coefficient
e	=	Error

3.4.4 Hypothesis Testing

The hypothesis testing in this research is aimed to prove the influence of independent variables toward dependent variable. The testing makes use of coefficient determination (R^2) and t-test.

1. Coefficient Determination (R^2)

The coefficient determination (R^2) is used to explain how the dependent variable could be explained by the independent variables. R^2 value exists between 0 and 1, thus the greater the R^2 value, it shows greater model can describe the dependent variable (Ghozali, 2012). The R^2 amount between 0-1 ($0 < R^2 < 1$) coefficient determination can be used to know the extent to which the independent variable can influence the dependent variable. Better result is when the percentage is closer to 1.

2. T-test

The researcher uses t-test to test the influence of independent variables toward dependent variable partially. This test aims to determine whether each of the independent variables is significantly affected on the dependent variable. The t-test is concluded based on the following result:

- a. If the significance value (p-value) ≤ 0.05 , then H_a is accepted. It means the independent variable partially significantly affect the dependent variable.
- b. If the significance value (p-value) > 0.05 , then H_a is rejected. It means the independent variable does not partially significantly affect the dependent variable.

3.4.5 Discussion

The researcher will compare the findings with the theoretical review, empirical findings, and hypotheses about the effects of good corporate governance and firm's

financial characteristics conducting tax avoidance in manufacturing companies. The result will determine whether there is consistency with theories and empirical findings in the previous research. If there is any difference, the researcher will find out the reason behind it.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents description of the research object, the results of analyzed data by using statistical tools also the interpretation data and discussion. Data analyses that are used in this research are descriptive statistical analysis; classical assumption test; multiple regression test; and hypothesis testing. Collected data were processed by using a computer program SPSS for windows 24.

4.1 Description of the Research Object

The population that serves as the object in this research are manufacturing companies listed in Indonesian Stock Exchange (IDX) during 2011-2016. The totals of manufacturing companies are 145 companies. The sample of the research is determined based on purposive sampling method with some criteria, and the processes to find the sample are presented in Table 4.1 below.

Table 4.1 Sample Selection

Criteria	Company
Manufacturing companies listed in Indonesia Stock Exchange (IDX)	145
Listed manufacturing companies not consistently listed and published annual report on IDX during 2011-2016	48
Listed manufacturing companies which do not use Indonesian Rupiah as a currency	13
Listed manufacturing companies suffering losses during 2011-2016	48
Manufacturing companies chosen as the sample in this research	36

The 36 list of companies have been presented in appendix 1.

4.2 Descriptive Statistics

Descriptive statistics describes the data of all variables being used in this study and yields minimum value, maximum value, mean, and standard deviation. The variables in this study include the variable tax avoidance, audit committee, audit quality, firm size, leverage, profitability, operating cash flow, and sales growth. The description statistics can be seen in the table 4.2.

Table 4.2 Descriptive Statistics

Descriptive Statistics					
	n	Minimum	Maximum	Mean	Std. Deviation
CETR	216	.090	9.893	.35032	.680850
AC	216	3.000	5.000	3.16204	.438436
AQ	216	.000	1.000	.60185	.490653
SIZE	216	25.308	33.199	28.67749	1.776079
LEV	216	.020	.837	.36927	.164125
PROF	216	.001	.657	.13238	.108894
OCF	216	-.162	.572	.12570	.120948
SG	216	-.299	1.273	.11538	.142948
Valid N (listwise)	216				

From the calculation of descriptive statistics in the table above with total data for each variables are 216. It can be explained as follows:

1. The data show that the minimum value of tax avoidance (CETR) is 0.090 that belongs to Mandom Indonesia Tbk (TCID) in 2014 and the maximum value of tax avoidance is 9.893 owned by Indospring Tbk (INDS) in 2015. The average

value of tax avoidance is 0.350 and the standard deviation is 0.681. These results show that the value of standard deviation is higher than the average value of tax avoidance, it means that the tax avoidance variable used in this research is heterogeneous. Compared with research by Eksandy (2017) that deals with consumer goods sector, obtained a lower average of 0.2941 or 29.41 % from the sample with total amount of 216 companies. It shows that tax avoidance by the companies in consumer goods is higher, but in general, the tax avoidance action is the same as that of manufacturing companies. The similarities include various operational activities or complicated transactions such as raw material inventory, production, and sales.

2. The data show that the minimum value of audit committee (AC) is 3.00 and the maximum value of audit committee is 5.00. The average value of audit committee is 3.162 and the standard deviation is 0.438. These results show that the value of standard deviation is less than the average value of audit quality, it means that the audit quality variable used in this research is homogenous. Compared with research by Eksandy (2017) that deals with consumer goods sector, obtained a lower average of 3.157 from the sample with total amount of 216 companies. It explains that audit committee members in manufacturing companies and consumer goods sector companies are usually three people.
3. The data show that the minimum value of audit quality (AQ) is 0.00 and the maximum value of audit quality is 1.00. The average value of audit quality is 0.602 and the standard deviation is 0.491. These result shows that the value of

standard deviation is less than the average value of audit quality, it means that the audit quality variable used in this research is homogeneous. Compared with research by Eksandy (2017) that deals with consumer goods sector, obtained a higher average of 0.643 from the sample with total amount of 216 companies. This explains that in general, companies use audit services from public accounting firms that become the big 4, or can be said the big four accounting firms.

4. The data show that the minimum value of firm size (SIZE) is 25.308 that belongs to Lion Mesh Prima Tbk (LMSH) in 2011 and the maximum value of firm size is 33.199 owned by Astra International Tbk (ASII) in 2015. The average value of firm size is 28.677 and the standard deviation is 1.776. These results show that the value of standard deviation is less than the average value of firm size, it means that the firm size variable used in this research is homogeneous. Compared with research by Kim & Im (2017) that deals with firms listed in Korea Stock Exchange, obtained a lower average of 24.188 from the sample with total amount of 216 companies. This explains that firm size in manufacturing companies in Indonesia has total assets greater than in Korea. Manufacturing companies in Indonesia, generally produce their own products, therefore they have larger assets.
5. The data show that the minimum value of leverage (LEV) is 0.020 that belongs to Indospring Tbk (INDS) in 2013 and the maximum value of leverage is 0.837 owned by Indal Aluminium Industry Tbk (INAI) in 2015. The average value of

leverage is 0.369 and the standard deviation is 0.164. These results show that the value of standard deviation is less than the average value of leverage, it means that the leverage variable used in this research is homogeneous. Compared with research by Kim & Im (2017) that deals with firms listed in Korea Stock Exchange, obtained a lower average is 0.146 from the sample with total amount of 216 companies. This explains that manufacturing companies in Indonesia has greater funding from external sources. If the company can manage third party funds then the possibility to earn business profits is also higher.

6. The data show that the minimum value of profitability (PROF) is 0.001 that belongs to Indospring Tbk (INDS) in 2015 and the maximum value of profitability is 0.657 owned by Multi Bintang Indonesia Tbk (MLBI) in 2011. The average value of profitability is 0.132 and the standard deviation is 0.109. These result shows that the value of standard deviation is less than the average value of profitability, it means that the profitability variable used in this research is homogeneous. Compared with research by Kim & Im (2017) that deals with firms listed in Korea Stock Exchange, obtained a lower average is 0.078 from the sample with total amount of 216 companies. This shows that manufacturing companies in Indonesia are considered capable of managing assets to gain profits.
7. The data show that the minimum value of operating cash flow (OCF) is -0.162 that belongs to Indal Aluminium Industry Tbk (INAI) in 2012 and the

maximum value of operating cash flow is 0.572 owned by HM Sampoerna Tbk (HMSP) in 2016. The average value of operating cash flow is 0.126 and the standard deviation is 0.121. These result shows that the value of standard deviation is less than the average value of operating cash flow, it means that the operating cash flow variable used in this research is homogeneous. Compared with research by Kim & Im (2017) that deals with firms listed in Korea Stock Exchange, obtained a lower average is 0.081 from the sample with total amount of 216 companies. This shows that manufacturing companies in Indonesia have more sufficient cash flow to repay the loan, maintain the operating capability, and pay dividend than those in Korea.

8. The data show that the minimum value of sales growth (SG) is -0.299 that belongs to HM Sampoerna Tbk (LMSH) in 2015 and the maximum value of sales growth is 1.273 owned by Multi Bintang Indonesia Tbk (MLBI) in 2011. The average value of sales growth is 0.115 and the standard deviation is 0.143. These result shows that the value of standard deviation is higher than the average value of sales growth, it means that the sales growth variable used in this research is heterogeneous. Compared with research by Kim & Im's (2017) that deals with firm listed in Korea Stock Exchange, obtained a higher average is 0.122 from the sample with total amount of 216 companies. This shows that sales growth in Korea is higher than in Indonesia.

4.3 Classical Assumption Test

1. Normality Test

Normality test is used to test whether in the regression model the dependent variable and the independent variable has a normal distribution or not. In this research, the normality test uses one sample Kolmogorov-Smirnov test.

Table 4.3 Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		216
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.66606022
Most Extreme Differences	Absolute	.362
	Positive	.362
	Negative	-.286
Test Statistic		.362
Asymp. Sig. (2-tailed)		.000 ^c

Based on the processed data in the table above, the value of Kolmogorov-smirnov is shown as much as 0.362 and the Asymp. Sig. (2-tailed) is 0.000. The result shows Asymp. Sig. (2-tailed) is less than 0.05, which means that the residual value shown is not, fulfilling the criteria of data which is normally distributed. Therefore, it can be concluded that the regression model is not normally distributed.

To make the data fulfilling the criteria of normality test, the researcher decides to eliminate some data, as the data outliers. Outlier data can be detected by determining the limit value categorized as outlier data by converting the data value into standardized / Z-score score. The requirement to delete data using standardized / Z-score is when data exceeds Z, the value is greater than + 2.5 or Z less than - 2.5.

The original sample amounts to 36 companies. The researcher found there are 10 companies that have data outliers in this study, and it should be removed from the sample for use in further analysis. Finally there are 26 companies to be used in this study.

Table 4.4 Descriptive Statistic after Elimination

Descriptive Statistics					
	n	Minimum	Maximum	Mean	Std. Deviation
CETR	156	.090	.598	.27254	.074241
AC	156	3.000	4.000	3.11538	.320514
AQ	156	.000	1.000	.67949	.468177
SIZE	156	25.494	33.199	28.88019	1.840287
LEV	156	.098	.837	.37117	.175994
PROF	156	.011	.657	.14988	.116712
OCF	156	-.162	.572	.14154	.129984
SG	156	-.161	1.273	.11627	.142682
Valid N (listwise)	156				

1. The data show that the minimum value of tax avoidance (CETR) is 0.090 that belongs to Mandom Indonesia Tbk (TCID) in 2014 and the maximum

value of tax avoidance is 0.598 owned by Indal Aluminium Industry Tbk in 2016. The average value of tax avoidance is 0.272 and the standard deviation is 0.074. These result shows that the value of standard deviation is less than the average value of tax avoidance, it means that the tax avoidance variable used in this research is homogeneous. Compared with research by Eksandy (2017) that deals with consumer goods sector, obtained a higher average of 0.2941 or 29.41% from the sample with total amount of 216 companies. It shows that the companies in consumer goods sector tend to conduct more tax avoidance, but in general the tax avoidance action is just the same as that of manufacturing companies. The similarities include various operational activities or complicated transactions such as raw material inventory, production, and sales.

2. The data show that the minimum value of audit committee (AC) is 3.00 and the maximum value of audit committee is 4.00. The average value of audit committee is 3.115 and the standard deviation is 0.320. These result shows that the value of standard deviation is less than the average value of audit committee, it means that the audit committee variable used in this research is homogeneous. Compared with research by Eksandy (2017) that deals with consumer goods sector, obtained a higher average of 3.157 from the sample with total amount of 216 companies. It explains that audit committee members in manufacturing companies and consumer goods sector companies usually are three people.

3. The data show that the minimum value of audit quality (AQ) is 0.00 and the maximum value of audit quality is 1.00. The average value of audit quality is 0.679 and the standard deviation is 0.468. These result shows that the value of standard deviation is less than the average value of audit quality, it means that the audit quality variable used in this research is homogeneous. Compared with research by Eksandy (2017) consumer goods sector, obtained a lower average of 0.643 from the sample with total amount of 216 companies. This explains that in general, companies use audit services from public accounting firms that become the big 4, or the big four accounting firm.
4. The data show that the minimum value of firm size (SIZE) is 25.494 that belong to Pyridam Farma Tbk (PYFA) in 2013 and the maximum value of firm size is 33.199 owned by Astra International Tbk (ASII) in 2015. The average value of firm size is 28.880 and the standard deviation is 1.840. These result shows that the value of standard deviation is less than the average value of firm size, it means that the firm size variable used in this research is homogeneous. Compared with research by Kim & Im (2017) that deals with firm listed in the Korea Stock Exchange, obtained a lower average is 24.188 from the sample with total amount of 216 companies. This explains that firm size in manufacturing companies in Indonesia has greater total assets than those in Korea. Manufacturing companies in

Indonesia, generally produce their own products, therefore they have larger assets.

5. The data show that the minimum value of leverage (LEV) is 0.098 that belongs to Mandom Indonesia Tbk (TCID) in 2015 and the maximum value of leverage is 0.837 owned by Indal Aluminium Industry Tbk (INAI) in 2015. The average value of leverage is 0.371 and the standard deviation is 0.176. These result shows that the value of standard deviation is less than the average value of leverage, it means that the leverage variable used in this research is homogeneous. Compared with research by Kim & Im (2017) firms listed in Korea Stock Exchange, obtained a lower average is 0.146 from the sample with total amount of 216 companies. This explains that manufacturing companies in Indonesia has greater funding from external sources. If the company can manage third party funds then the possibility to earn business profits is also higher.
6. The data show that the minimum value of profitability (PROF) is 0.011 that belongs to Indofood Sukses Makmur Tbk (INDF) in 2013 and the maximum value of profitability is 0.657 owned by Multi Bintang Indonesia Tbk (MLBI) in 2011. The average value of profitability is 0.149 and the standard deviation is 0.117. These result shows that the value of standard deviation is less than the average value of profitability, it means that the profitability variable used in this research is homogeneous. Compared with research by Kim & Im (2017) firms listed in the Korea Stock Exchange,

obtained a lower average is 0.078 from the sample with total amount 216 companies. This shows that manufacturing companies in Indonesia are considered capable of managing assets to gain profits.

7. The data show that the minimum value of operating cash flow (OCF) is – 0.162 that belongs to Indal Aluminium Industry Tbk (INAI) in 2011 and the maximum value of operating cash flow is 0.572 owned by HM Sampoerna Tbk in 2016. The average value of operating cash flow is 0.141 and the standard deviation is 0.130. These result shows that the value of standard deviation is less than the average value of operating cash flow, it means that the operating cash flow variable used in this research is homogeneous. Compared with research by Kim & Im (2017) that deals with firms listed in Korea Stock Exchange, obtained a lower average is 0.081 from the sample with total amount of 216 companies. This shows that manufacturing companies in Indonesia have more sufficient cash flow to repay loans, maintain the operating capability of the company, and pay dividend than the companies in Korea.
8. The data show that the minimum value of sales growth (SG) is – 0.161 that belongs to Multi Bintang Indonesia Tbk (MLBI) in 2015 and the maximum value of sales growth is 1.273 owned by Multi Bintang Indonesia Tbk (MLBI) in 2011. The average value of sales growth is 0.116 and the standard deviation is 0.143. These result shows that the value of standard deviation is higher than the average value of sales growth, it means that the

sales growth variable used in this research is heterogeneous. Compared with research by Kim & Im (2017) that deals with firms listed in Korea Stock Exchange, obtained a higher average is 0.122 from the sample with total amount of 216 companies. This shows that sales growth in Korea is higher than in Indonesia.

Table 4.2 Normality Test after Elimination

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		156
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.06626001
Most Extreme Differences	Absolute	.078
	Positive	.077
	Negative	-.078
Test Statistic		.078
Asymp. Sig. (2-tailed)		.022 ^c

Based on the table above, the value of Kolmonogorov-smirnov is 0.078 and the Asymp. Sig. (2-tailed) is 0.022. The criterion of normal data is the Asymp. Sig. (2-tailed) more than 0.05 and the value of Asymp. Sig. (2-tailed) is fulfilling the criteria of data. Therefore, it can be concluded that the regression model is normally distributed.

2. Multicollinearity Test

Multicollinearity test is used to test whether in the regression model a correlation is found among independent variables. A good regression model

is shown when the tolerance value is more than 0.10 and the value of Variance Inflation Factor (VIF) is less than 10.00. Therefore, the result of multicollinearity test is shown below.

Table 4.3 Multicollinearity Test

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AC	.882	1.134
	AQ	.496	2.017
	SIZE	.662	1.511
	LEV	.842	1.188
	PROF	.260	3.846
	OCF	.283	3.536
	SG	.879	1.138

a. Dependent Variable: CETR

Based on the analysis of multicollinearity test above, audit committee; audit quality; firm size; leverage; profitability; operating cash flow; and sales growth have a tolerance value more than 0.10. The variable audit committee; audit quality; firm size; leverage; profitability; operating cash flow; and sales growth have a VIF value less than 10.00. Therefore, it can be concluded that the regression model is free from multicollinearity.

3. Autocorrelation Test

Autocorrelation test is used to test whether it is found a correlation in the regression model between the period (t) and the previous period (t-1). A good regression model is assumed to be free from autocorrelation.

Autocorrelation examines whether there is an autocorrelation in the model used in Durbin-Watson statistic test. The criteria have proven when the degree of dw is more than the value of du and less than the value of $4 - du$ ($du < dw < 4 - du$). The result of the durbin-watson test is shown in the table below:

Table 4.4 Autocorrelation Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.451 ^a	.203	.166	.067809	1.714

a. Predictors: (Constant), SG, AC, SIZE, OCF, LEV, AQ, PROF

b. Dependent Variable: CETR

Based on the data above, the result of durbin-watson test with $n = 156$ is 1.714. The value of du with $n = 156$; $k = 7$ is 1.832 and the value of dl is 1.645. It can be concluded that $1.645 \leq 1.714 \leq 1.832$ which means that the regression model is no positive autocorrelation.

4. Heteroscedasticity Test

Heteroscedasticity test is used to test whether in the variance it is found the inequality of variance from residual one observation to another observation. A good regression model is assumed to be free from heteroscedasticity problem. Scatterplot chart is used to detect whether there is heteroskedastisitas in this research. The detection of the heteroscedasticity can be done by looking at whether there is a specific pattern on the scatterplot (Ghozali, 2012). If there is no clear pattern, and the points are spread above

and below the number 0 on the Y axis, there is no heteroscedasticity. The graphic of scatterplot is displayed below:

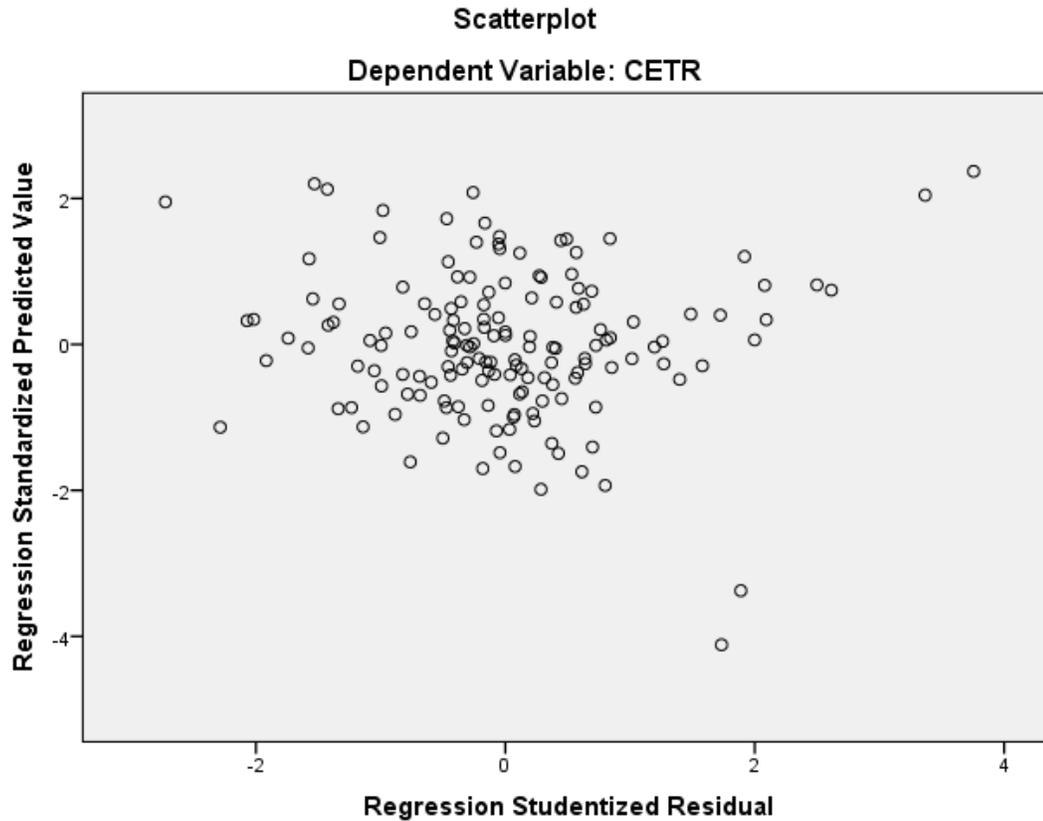


Figure 5.1 Heteroscedasticity Test

Based on the scatterplot above, the points are spread randomly and spread out either above or below the number 0 on the Y axis. It can be concluded that the regression model is free from heteroscedasticity.

4.4 Multiple Linear Regression

Multiple linear regression analysis is used to measure the strength of the influence of independent variables on the dependent variable. This research uses

multiple linear regression to test the effect of seven independent variables-audit committee, audit quality, firm size, profitability, leverage, operating cash flow, and sales growth on the dependent variable tax avoidance. The calculation of coefficient of multiple linear regression is shown below:

Table 4.5 Multiple Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.580	.119		4.884	.000
	AC	.002	.018	.010	.122	.903
	AQ	.029	.017	.185	1.773	.078
	SIZE	-.012	.004	-.300	-3.328	.001
	LEV	.133	.034	.315	3.933	.000
	PROF	-.260	.092	-.408	-2.836	.005
	OCF	.077	.079	.135	.981	.328
	SG	-.050	.041	-.097	-1.234	.219

a. Dependent Variable: CETR

Based on the calculation above, the result of multiple regression analysis is as follows:

$$\text{CETR} = 0.580 + 0.002 \text{ AC} + 0.029 \text{ AQ} - 0.012 \text{ SIZE} + 0.133 \text{ LEV} - 0.260 \text{ PROF} + 0.077 \text{ OCF} - 0.050 \text{ SG}$$

Based on the regression model above, it can be concluded that:

1. The constant value is 0.580 meaning that if audit committee (AC), audit quality (AQ), firm size (SIZE), leverage (LEV), profitability (PROF),

operating cash flow (OCF), and sales growth (SG) are constant so that the value of tax avoidance (CETR) is 0.580.

2. The regression coefficient value of audit committee is 0.002. It means if the value of audit committee increase by 1 value, the value of CETR will increase by 0.002 with the assumption of other independent variables are constant.
3. The regression coefficient value of audit quality is 0.029. It means if the value of audit quality increase by 1 value, the value of CETR will increase by 0.029 with the assumption of other independent variables are constant.
4. The regression coefficient value of firm size is -0.012. It means if the value of firm size increase by 1 value, the value of CETR will decrease by 0.012 with the assumption of other independent variables are constant.
5. The regression coefficient value of leverage is 0.133. It means if the value of leverage increase by 1 percent, the value of CETR will increase by 0.133 percent with the assumption of other independent variables are constant.
6. The regression coefficient value of profitability is -0.260. It means if the value of profitability increase by 1 percent, the value of CETR will decrease by 0.260 percent with the assumption of other independent variables are constant.
7. The regression coefficient value of operating cash flow is 0.077. It means if the value of operating cash flow increase by 1 percent, the value of CETR

will increase by 0.077 percent with the assumption of other independent variables are constant.

8. The regression coefficient value of sales growth is -0.050. It means if the value of sales growth increase by 1 percent, the value of CETR will decrease by 0.050 percent with the assumption of other independent variables are constant.

4.5 Hypothesis Testing

1. Coefficient Determination (R^2)

Table 4.6 Coefficient Determination (R^2) Test

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.451 ^a	.203	.166	.067809

a. Predictors: (Constant), SG, AC, SIZE, OCF, LEV, AQ, PROF

b. Dependent Variable: CETR

Coefficient determination is used to explain how the dependent variable could explain the independent variables. Based on the result shown by the table above, it shows that the value of R^2 is 0.203 or 20.3 %. Thus, it can be concluded that 20.3 % of tax avoidance can be explained by audit committee (AC), audit quality (AQ), firm size (SIZE), leverage (LEV), profitability (PROF), operating cash flow (OCF), and sales growth (SG), meanwhile 79.7 % is explained by other variables.

2. T test

This test aims to determine whether each independent variable significantly affects the dependent variable. The t-test is concluded based on the following results:

- a. If the significance value (p-value) ≤ 0.05 , then H_a is accepted. It means the independent variable partially significantly affect the dependent variable.
- b. If the significance value (p-value) > 0.05 , then H_a is rejected. It means the independent variable does not partially significantly affect the dependent variable.

Table 4.7 T-test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.580	.119		4.884	.000
AC	.002	.018	.010	.122	.903
AQ	.029	.017	.185	1.773	.078
SIZE	-.012	.004	-.300	-3.328	.001
LEV	.133	.034	.315	3.933	.000
PROF	-.260	.092	-.408	-2.836	.005
OCF	.077	.079	.135	.981	.328
SG	-.050	.041	-.097	-1.234	.219

a. Dependent Variable: CETR

The analyses results of hypothesis test calculations in this study are as follows:

1. Audit Committee

The results reveal that the audit committee has a significance value of 0.903 and the audit committee has a coefficient value of 0.002. It means every change of one audit committee value has a positive effect on CETR, and has a negative effect on tax avoidance. Hypothesis H1 expecting "audit committee has negative effect on tax avoidance" is rejected, because the significance value is more than 0.05.

2. Audit Quality

The results show that the audit quality has a significance value of 0.078 and the audit quality has a coefficient value of 0.029. That means every change of one audit quality value has a positive effect on CETR, and has a negative effect on tax avoidance. Hypothesis H2 expecting "audit quality has negative effect on tax avoidance" is rejected, because the significance value is more than 0.05.

3. Firm Size

The results reveal that the firm size has a significance value of 0.001 and the firm size has a coefficient value of -0.012. It means every change of one firm size value has a negative effect on CETR, and has a positive effect on tax avoidance. Hypothesis H3 expecting "firm size has positive effect on tax avoidance" is accepted.

4. Leverage

The results reveal that the leverage has a significance value of 0.000 and the leverage has a coefficient value of 0.133. That means every change of

one leverage value has a positive effect on CETR, and has a negative effect on tax avoidance. Hypothesis H4 expecting "leverage has negative effect on tax avoidance" is accepted.

5. Profitability

The results show that the profitability has a significance value of 0.005 and the profitability has a coefficient value of -0.260. It means every change of one profitability value has a negative effect on CETR, and has a positive effect on tax avoidance. Hypothesis H5 expecting "profitability has positive effect on tax avoidance" is accepted.

6. Operating cash flow

The results have proven that the operating cash flow has a significance value of 0.328 and the operating cash flow has a coefficient value of 0.077. That means every change of one operating cash flow value has a positive effect on CETR, and has a negative effect on tax avoidance. Hypothesis H6 expecting "operating cash flow has positive effect on tax avoidance" is rejected, because the significance value is more than 0.05 and there is contradiction between the hypothesis and coefficient.

7. Sales growth

The results reveal that the sales growth has a significance value of 0.219 and the sales growth has a coefficient value of -0.050, which means every change of one sales growth value has a negative effect on CETR, and has a positive effect on tax avoidance. Hypothesis H7 expecting "sales growth

has positive effect on tax avoidance" is rejected, because the significance value is more than 0.05.

4.6 Discussion

The discussion here presents a comparison between the research findings, the related theories, a few empirical findings, and hypotheses about the effects of good corporate governance and firm's financial characteristics conducting tax avoidance in manufacturing companies. The result will determine whether there is consistency between the theories, the empirical findings, and the previous research.

Table 4.8 Discussion Table

Model	Unstandardized Coefficients	Sig.	Result
	B		
(Constant)	.580	.000	
AC	.002	.903	Rejected
AQ	.029	.078	Rejected
SIZE	-.012	.001	Accepted
LEV	.133	.000	Accepted
PROF	-.260	.005	Accepted
OCF	.077	.328	Rejected
SG	-.050	.219	Rejected

a. Dependent Variable: CETR

1. Effect of audit committee on tax avoidance

The results of the study show that audit committee has positive insignificant effect on tax avoidance. It means that the amount of audit

committee members has no effect on tax avoidance. The number of audit committee does not guarantee that the company will not do tax avoidance.

Even if the members of audit committee increase in a company, that not prevents the company from tax avoidance this possibility because the audit committee is not the major part of decision-making regarding tax policies in the company. In addition not the major part of decision-making role, the audit committee does not take effect on tax avoidance, it is caused by the inability of the independent audit committee to perform its duties in overseeing the internal control structure of the company and monitoring the supervision process performed by internal audit well.

Therefore, the owner or top management performs decision making in a company, which means that the audit committee does not affect much the management of the company against the tax burden policy associated with tax avoidance activities.

This result is in line with the previous studies conducted by Maharani & Suardana (2014), Sukartha & Swingly (2015) and Eksandy (2017) which showed that audit committee had no significant effect on tax avoidance.

2. Effect of audit quality on tax avoidance

The research finding shows that audit quality has negative insignificant effect on tax avoidance. It indicates if a company is audited by the big four accounting firm, it has no effect on conducting tax avoidance. It is because Indonesia adheres a self-assessment system in tax collection. Taxpayer is a

company, with full authority to calculate, pay, and report the tax payable in accordance with the provisions of taxation in force so that in this system required taxation awareness by the taxpayer itself.

Therefore, the awareness of the taxpayer itself is a consideration in tax avoidance, the result of financial statement audit cannot be one of considerations whether the company takes tax avoidance action or not. This possibility probably due the audit conducted by the KAP is focused on the audit of financial statements. Where the audit of financial statements aims to determine whether the financial statements presented by the company is in conformity with Accounting Standards is generally acceptable, not to measure the presence or absence of fraud committed by companies, especially fraud in taxation, one of which is tax avoidance. The authorized in measuring whether there is fraud committed by a company that is forensic auditor.

This result is in line with the previous studies conducted by Maharani & Suardana (2014), Kim & Im (2017) Eksandy (2017) which showed that audit quality had no significant effect on tax avoidance.

3. Firm size

The result of the study shows that firm size has positive significant effect on tax avoidance. It indicates that firm size does affect tax avoidance undertaken by management. Companies classified as large company (having

large assets) will tend to be more capable and more stable to generate profits than those with small total assets. Companies with large profits will consider risks in managing tax burden.

Based on agency theory, resources owned by the company can be used to maximize agent performance compensation, which is by pressing tax burden of company to maximize company performance. The firm that belongs to large firm tends to have more human resources to manage taxes. Human resources who are experts in taxation are required to manage corporate taxes in order to minimize corporate tax burden.

This result is in line with the previous studies conducted by Dewinta & Setiawan (2015) and Sukartha & Swingly (2015) which showed that firm size had positive significant effect on tax avoidance.

4. Leverage

The research findings shows that leverage has negative significant effect on tax avoidance. It explains that the higher the level of leverage obtained by the company, then tax avoidance actions will be higher. In agency theory, the higher the leverage of the company the more transfer from the creditor to the shareholders of the company. Higher leverage indicates more third party debt financing used by the company than the funding of its own capital.

If the company uses third party funding, it will generate interest expense. The component of the interest expense will reduce the profit before tax, so the tax burden to be paid by companies will be reduced. Companies with

more debt have good tax rate, this means with a large amount of debt, tax avoidance will tend to be lower.

This result is in line with the previous studies conducted Sukartha & Swingly (2015) and Dewinta & Setiawan (2015) which showed that leverage had a negative significant effect on tax avoidance.

5. Profitability

The result of this study shows that profitability has positive significance effect on tax avoidance. It means that the higher profitability generated by the company, the tax avoidance action is higher. Profitability is one measure of the performance of a company. It shows the ability of a company in generating profit over a certain period at a certain level of sales, assets and capital stock (Dewinta & Setiawan, 2015).

Based on agency theory, the principal will spur the agents to increase corporate profits. With the increase in profits earned by the company, the income tax will increase in line with the increase in profits. Therefore, agent will tend to manage tax planning. With the maturation of tax planning by the company, will generate an optimal tax so that the tendency of tax avoidance will increase. Therefore, we can concluded that if profitability increases, tax avoidance increase.

This result in line with the previous studies conducted by Kim & Im (2017), Maharani & Suardana (2014) and Rinaldi & Cheisviyanny (2015)

which showed that profitability has positive significant effect on tax avoidance.

6. Operating cash flow

The research finding shows that operating cash flow has negative insignificant effect on tax avoidance. It shows that the operation of the company does not affect the tax avoidance of the company. The inflows and outflows of the company's operations have no effect on tax avoidance, since the cash that comes from operations activities cannot be a deductible expense.

7. Sales growth

The result of this study shows that sales growth has positive insignificant effect on tax avoidance. It shows that sales growth is not able to decrease tax avoidance actions by management. This is because the growth rate of manufacturing companies is still relatively low, if the growth rate still low, the profit that companies get also low. So the addition of sales that occur has not been able to reduce tax avoidance.

This result is in line with the previous studies conducted by Kim & Im (2017) and Sukartha & Singly (2015) which showed that sales growth had no significant effect on tax avoidance.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusions of research findings and discussions, research limitations, and recommendations for further studies.

5.1 Conclusion

Based on the data analysis in the Chapter IV, it can be concluded as follows:

1. The significant value of audit committee is 0.903 and the coefficient of audit committee is 0.002. Hypothesis 1 that states “Audit committee (AC) has negative significant effect on tax avoidance” is rejected, because the significant value is more than 0.05. It means that audit committee has no effect on tax avoidance.
2. The significant value of audit quality is 0.078 and the coefficient of audit quality is 0.29. Hypothesis 2 that states “Audit quality (AQ) has negative significant effect on tax avoidance” is rejected, because the significant value is more than 0.05. It means that audit committee has no effect on tax avoidance.
3. The significant value of firm size is 0.001 and the coefficient of firm size is -0.012. Hypothesis 3 that states “Firm size (FS) has positive significant effect on tax avoidance” is accepted. It means that larger companies tend to conduct tax avoidance.

4. The significant value of leverage is 0.000 and the coefficient of leverage is 0.133. Hypothesis 4 that states “Leverage (Lev) has negative significant effect on tax avoidance” is accepted. It means that the higher the liability, it will make the company to avoid tax avoidance.
5. The significant value of profitability is 0.005 and the coefficient of profitability is -0.260. Hypothesis 5 that states “Profitability (Prof) has positive significant effect on tax avoidance” is accepted. It means that the higher the ratio of profitability, it will influence the company to do tax avoidance.
6. The significant value of operating cash flow is 0.328 and the coefficient of operating cash flow is 0.077. Hypothesis 6 that states “Operating cash flow (OCF) has positive significant effect on tax avoidance” is rejected, because the significant value is more than 0.05. It means that operating cash flow has no effect on tax avoidance.
7. The significant value of sales growth is 0.276 and the coefficient of sales growth is -0.027. Hypothesis 7 that states “Sales growth (SG) has positive significant effect on tax avoidance” is rejected, because the significant value more is than 0.05. It means that sales growth has no effect on tax avoidance.

5.2 Research Implication

Based on the research findings, this research has various implications:

1. Company

This research is expected to provide additional information to the company in making decisions related to tax planning strategy used, also for employees as the basis of corporate tax planning.

2. Government

The results of this study is expected to be a reference to improve and cover the shortfall in the taxation rules in Indonesia, so that the state tax revenue can be maximized.

5.3 Research Limitation

This research has a few limitations as follows:

1. This research is using the manufacturing companies listed in Indonesia Stock Exchange during 2011-2016, and only 26 companies that fulfill the criteria of the research.
2. The ability of the model to explain about tax avoidance is only 22.9 %, and the rest 77.1 % explained by other variable outside the model.

5.4 Recommendation

Based on the conclusions and limitations above, the recommendations for future research are as follows:

1. It is recommended that further studies increase the number of research samples with the type of industry and the number of research samples, so it is expected to generalize the results of research.

2. It is recommended that further studies add or replace the independent variables, so it is possible to obtain better results of research in explaining variations of tax avoidance variables.

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APPENDICES

Appendix 1

List of Research Sample

List of sample for 36 companies

Number	Company's Code	
1	AMFG	Asahimas Flat Glass Tbk. [S]
2	ARNA	Arwana Citramulia Tbk.
3	ASII	Astra International Tbk. [S]
4	AUTO	Astra Otoparts Tbk. [S]
5	BATA	Sepatu Bata Tbk. [S]
6	CPIN	Charoen Pokphand Indonesia Tbk. [S]
7	DLTA	Delta Djakarta Tbk.
8	DVLA	Darya-Varia Laboratoria Tbk.
9	GGRM	Gudang Garam Tbk.
10	HMSP	HM Sampoerna Tbk.
11	ICBP	Indofood CBP Sukses Makmur Tbk. [S]
12	IGAR	Champion Pacific Indonesia Tbk.
13	INAI	Indal Aluminium Industry Tbk.
14	INDF	Indofood Sukses Makmur Tbk. [S]
15	INDS	Indospring Tbk. [S]
16	INTP	Indocement Tunggul Prakarsa Tbk. [S]
17	KAEF	Kimia Farma (Persero) Tbk. [S]
18	KBLI	KMI Wire and Cable Tbk. [S]
19	KLBF	Kalbe Farma Tbk. [S]
20	LION	Lion Metal Works Tbk. [S]
21	LMSH	Lion Mesh Prima Tbk. [S]
22	MERK	Merck Tbk. [S]
23	MLBI	Multi Bintang Indonesia Tbk.
24	MYOR	Mayora Indah Tbk. [S]
25	NIPS	Nipress Tbk. [S]
26	PYFA	Pyridam Farma Tbk. [S]
27	ROTI	Nippon Indosari Corpindo Tbk. [S]
28	SKLT	Sekar Laut Tbk. [S]
29	SMSM	Selamat Sempurna Tbk. [S]

30	SRSN	Indo Acidatama Tbk. [S]
31	TCID	Mandom Indonesia Tbk. [S]
32	TOTO	Surya Toto Indonesia Tbk. [S]
33	TSPC	Tempo Scan Pacific Tbk. [S]
34	ULTJ	Ultrajaya Milk Industry & Trading Co. Tbk. [S]
35	UNIT	Nusantara Inti Corpora Tbk.
36	UNVR	Unilever Indonesia Tbk. [S]

List of Sample for 26 Companies

Number	Company's Code	
1	AMFG	Asahimas Flat Glass Tbk. [S]
2	ASII	Astra International Tbk. [S]
3	AUTO	Astra Otoparts Tbk. [S]
4	BATA	Sepatu Bata Tbk. [S]
5	DLTA	Delta Djakarta Tbk.
6	DVLA	Darya-Varia Laboratoria Tbk.
7	GGRM	Gudang Garam Tbk.
8	HMSP	HM Sampoerna Tbk.
9	ICBP	Indofood CBP Sukses Makmur Tbk. [S]
10	IGAR	Champion Pacific Indonesia Tbk.
11	INAI	Indal Aluminium Industry Tbk.
12	INDF	Indofood Sukses Makmur Tbk. [S]
13	INTP	Indocement Tunggul Prakarsa Tbk. [S]
14	KAEF	Kimia Farma (Persero) Tbk. [S]
15	KLBF	Kalbe Farma Tbk. [S]
16	LION	Lion Metal Works Tbk. [S]
17	MERK	Merck Tbk. [S]
18	MLBI	Multi Bintang Indonesia Tbk.
19	NIPS	Nipress Tbk. [S]
20	PYFA	Pyridam Farma Tbk. [S]
21	SKLT	Sekar Laut Tbk. [S]
22	SMSM	Selamat Sempurna Tbk. [S]
23	TCID	Mandom Indonesia Tbk. [S]
24	TOTO	Surya Toto Indonesia Tbk. [S]
25	ULTJ	Ultrajaya Milk Industry & Trading Co. Tbk. [S]
26	UNVR	Unilever Indonesia Tbk. [S]

Appendix 2

Data used for analysis

CETR

Company Code	2011	2012	2013	2014	2015	2016
AMFG	0.270	0.246	0.320	0.229	0.329	0.337
ASII	0.162	0.204	0.204	0.232	0.244	0.331
AUTO	0.198	0.165	0.137	0.187	0.278	0.256
BATA	0.301	0.304	0.350	0.322	0.280	0.269
DLTA	0.254	0.260	0.261	0.266	0.277	0.279
DVLA	0.273	0.284	0.332	0.464	0.244	0.190
GGRM	0.212	0.269	0.257	0.278	0.278	0.229
HMSP	0.260	0.292	0.252	0.225	0.275	0.236
ICBP	0.309	0.307	0.297	0.333	0.299	0.298
IGAR	0.348	0.368	0.408	0.216	0.328	0.212
INAI	0.165	0.246	0.252	0.300	0.326	0.598
INDF	0.356	0.423	0.470	0.385	0.214	0.288
INTP	0.216	0.204	0.182	0.220	0.251	0.222
KAEF	0.159	0.202	0.190	0.239	0.349	0.269
KLBF	0.214	0.228	0.257	0.253	0.243	0.235
LION	0.294	0.196	0.191	0.256	0.219	0.327
MERK	0.169	0.318	0.401	0.289	0.244	0.351
MLBI	0.219	0.271	0.314	0.191	0.315	0.250
NIPS	0.351	0.268	0.319	0.249	0.436	0.339
PYFA	0.343	0.441	0.322	0.353	0.322	0.207
SKLT	0.564	0.319	0.353	0.254	0.278	0.317
SMSM	0.184	0.251	0.246	0.258	0.205	0.202
TCID	0.281	0.279	0.151	0.090	0.270	0.270
TOTO	0.260	0.288	0.284	0.248	0.308	0.377
ULTJ	0.271	0.146	0.159	0.245	0.155	0.256
UNVR	0.252	0.253	0.241	0.252	0.253	0.252

Audit Committee

Company Code	2011	2012	2013	2014	2015	2016
AMFG	4	4	4	4	4	3
ASII	3	3	3	3	3	3
AUTO	3	3	3	3	3	3
BATA	3	3	3	3	3	3
DLTA	3	3	3	3	3	3
DVLA	3	3	4	4	3	3
GGRM	3	3	3	3	3	3
HMSP	3	3	3	3	3	3
ICBP	3	3	3	4	3	3
IGAR	3	3	3	3	3	3
INAI	3	3	3	3	3	3
INDF	4	3	3	3	3	4
INTP	3	3	3	3	3	3
KAEF	3	3	4	4	3	3
KLBF	3	3	3	3	3	3
LION	3	3	3	3	3	3
MERK	3	3	3	3	3	3
MLBI	3	3	3	3	3	3
NIPS	3	3	3	3	3	3
PYFA	3	3	3	3	3	3
SKLT	3	3	3	3	3	3
SMSM	3	3	3	3	3	3
TCID	4	4	4	4	4	4
TOTO	3	3	3	3	3	3
ULTJ	3	3	3	3	3	3
UNVR	3	3	3	3	3	3

Audit Quality

Company Code	2011	2012	2013	2014	2015	2016
AMFG	1	1	1	1	1	1
ASII	1	1	1	1	1	1
AUTO	1	1	1	1	1	1
BATA	1	1	1	1	1	1
DLTA	1	1	1	1	1	1
DVLA	1	1	1	1	1	1
GGRM	1	1	1	1	1	1
HMSP	1	1	1	1	1	1
ICBP	1	1	1	1	1	1
IGAR	0	0	0	0	0	0
INAI	0	0	0	0	0	0
INDF	1	1	1	1	1	1
INTP	1	1	1	1	1	1
KAEF	0	0	0	0	0	0
KLBF	1	1	1	1	1	1
LION	0	0	0	0	0	0
MERK	1	1	1	1	1	1
MLBI	1	1	1	1	1	1
NIPS	0	0	0	0	0	0
PYFA	0	0	0	0	0	0
SKLT	0	0	0	0	0	0
SMSM	0	1	0	1	1	1
TCID	1	1	1	1	1	1
TOTO	1	1	1	1	1	1
ULTJ	0	0	0	0	0	0
UNVR	1	1	1	1	1	1

Firm Size

Company Code	2011	2012	2013	2014	2015	2016
AMFG	28.997	28.767	28.621	28.895	29.083	29.337
ASII	32.665	32.837	33.095	32.997	33.199	33.134
AUTO	30.166	29.815	30.297	29.572	30.313	30.294
BATA	27.076	27.246	27.376	27.414	26.971	27.402
DLTA	27.269	27.337	27.812	27.623	27.669	27.488
DVLA	27.551	27.703	27.805	27.843	27.950	28.057
GGRM	31.782	31.773	31.558	31.357	31.297	31.695
HMSP	30.899	30.977	30.942	31.381	31.269	30.595
ICBP	30.688	30.995	30.910	30.508	30.354	30.846
IGAR	26.597	26.467	26.475	26.581	26.674	26.809
INAI	27.140	27.023	27.923	27.916	27.523	27.364
INDF	31.714	31.989	32.151	32.085	32.040	31.612
INTP	30.950	30.756	31.037	30.994	30.912	30.530
KAEF	28.719	28.805	29.160	28.216	28.536	28.362
KLBF	29.744	29.874	30.248	30.057	30.354	30.151
LION	26.935	26.795	27.184	27.120	26.625	27.254
MERK	27.094	27.335	27.068	27.187	27.270	27.298
MLBI	28.209	28.373	27.773	28.453	28.433	27.831
NIPS	29.352	29.164	29.319	29.516	29.469	26.825
PYFA	26.244	26.527	25.494	26.656	27.066	26.434
SKLT	25.798	25.842	25.889	26.090	27.819	25.635
SMSM	27.759	28.190	27.997	28.429	28.444	28.162
TCID	28.014	28.248	28.413	28.364	27.754	27.863
TOTO	28.338	27.923	28.188	28.051	28.523	28.579
ULTJ	29.075	28.410	28.895	28.702	28.515	28.665
UNVR	30.115	29.981	30.449	30.290	30.387	30.222

Leverage

Company Code	2011	2012	2013	2014	2015	2016
AMFG	0.187	0.211	0.203	0.220	0.206	0.346
ASII	0.506	0.507	0.490	0.504	0.466	0.484
AUTO	0.242	0.382	0.295	0.322	0.279	0.293
BATA	0.325	0.417	0.446	0.308	0.314	0.312
DLTA	0.177	0.197	0.155	0.229	0.182	0.220
DVLA	0.211	0.217	0.231	0.221	0.293	0.295
GGRM	0.402	0.372	0.421	0.359	0.372	0.429
HMSF	0.493	0.524	0.483	0.196	0.158	0.473
ICBP	0.376	0.360	0.383	0.325	0.296	0.396
IGAR	0.183	0.225	0.283	0.247	0.191	0.150
INAI	0.789	0.805	0.807	0.820	0.837	0.835
INDF	0.424	0.509	0.530	0.520	0.465	0.410
INTP	0.136	0.147	0.133	0.142	0.136	0.133
KAEF	0.390	0.425	0.508	0.302	0.343	0.306
KLBF	0.213	0.217	0.201	0.249	0.181	0.210
LION	0.166	0.142	0.289	0.260	0.174	0.314
MERK	0.154	0.217	0.268	0.262	0.265	0.227
MLBI	0.446	0.635	0.714	0.580	0.752	0.566
NIPS	0.523	0.591	0.704	0.526	0.607	0.628
PYFA	0.354	0.441	0.302	0.367	0.368	0.464
SKLT	0.597	0.479	0.538	0.426	0.537	0.482
SMSM	0.410	0.344	0.431	0.351	0.299	0.408
TCID	0.193	0.307	0.184	0.176	0.098	0.131
TOTO	0.393	0.432	0.407	0.410	0.389	0.410
ULTJ	0.177	0.356	0.210	0.224	0.307	0.283
UNVR	0.669	0.649	0.719	0.678	0.693	0.681

Profitability

Company Code	2011	2012	2013	2014	2015	2016
AMFG	0.117	0.111	0.125	0.096	0.080	0.047
ASII	0.137	0.125	0.094	0.104	0.070	0.062
AUTO	0.084	0.128	0.067	0.158	0.033	0.043
BATA	0.121	0.065	0.091	0.052	0.110	0.163
DLTA	0.218	0.286	0.212	0.290	0.185	0.312
DVLA	0.131	0.139	0.106	0.065	0.078	0.099
GGRM	0.102	0.106	0.086	0.098	0.127	0.093
HMSP	0.379	0.359	0.395	0.300	0.367	0.416
ICBP	0.105	0.126	0.110	0.129	0.136	0.102
IGAR	0.156	0.142	0.111	0.157	0.134	0.158
INAI	0.038	0.048	0.027	0.022	0.025	0.066
INDF	0.081	0.044	0.011	0.051	0.064	0.091
INTP	0.158	0.209	0.128	0.183	0.188	0.198
KAEF	0.080	0.078	0.059	0.096	0.087	0.099
KLBF	0.184	0.188	0.150	0.174	0.154	0.171
LION	0.130	0.197	0.072	0.082	0.144	0.062
MERK	0.396	0.207	0.189	0.222	0.252	0.253
MLBI	0.657	0.237	0.394	0.432	0.356	0.416
NIPS	0.042	0.041	0.042	0.037	0.020	0.040
PYFA	0.039	0.015	0.044	0.025	0.031	0.035
SKLT	0.053	0.036	0.038	0.028	0.050	0.032
SMSM	0.193	0.241	0.186	0.208	0.223	0.206
TCID	0.109	0.094	0.074	0.262	0.124	0.119
TOTO	0.145	0.163	0.135	0.155	0.117	0.065
ULTJ	0.167	0.046	0.148	0.097	0.146	0.116
UNVR	0.404	0.397	0.382	0.593	0.373	0.401

Operating Cash Flow

Company Code	2011	2012	2013	2014	2015	2016
AMFG	0.144	0.132	0.125	0.156	0.086	0.060
ASII	0.061	0.049	0.063	0.099	0.074	0.107
AUTO	0.044	0.061	0.018	0.037	0.072	0.060
BATA	0.081	0.066	0.080	0.024	0.137	-0.025
DLTA	0.255	0.333	0.217	0.166	0.238	0.402
DVLA	0.079	0.111	0.090	0.084	0.156	0.122
GGRM	0.050	0.110	0.049	0.095	-0.002	0.028
HMSF	0.156	0.391	0.394	0.331	0.021	0.572
ICBP	0.094	0.159	0.131	0.171	0.143	0.155
IGAR	0.075	0.103	0.100	0.074	0.209	0.145
INAI	-0.162	0.036	-0.112	0.035	0.091	0.102
INDF	0.125	0.089	0.046	0.108	0.087	0.093
INTP	0.183	0.249	0.118	0.185	0.204	0.214
KAEF	0.096	0.054	0.043	0.045	0.103	0.111
KLBF	0.178	0.146	0.179	0.082	0.142	0.186
LION	0.105	0.154	0.093	0.103	0.110	0.078
MERK	0.267	0.059	0.155	0.250	0.191	0.325
MLBI	0.463	0.438	0.469	0.449	0.409	0.450
NIPS	-0.015	0.019	-0.094	-0.008	-0.089	-0.101
PYFA	-0.003	0.009	0.014	0.098	0.042	-0.033
SKLT	0.079	0.003	0.089	0.083	0.071	0.061
SMSM	0.202	0.257	0.245	0.241	0.258	0.264
TCID	0.173	0.067	0.121	0.058	0.065	0.199
TOTO	0.152	0.174	0.184	0.124	0.099	0.118
ULTJ	0.184	0.148	0.189	0.044	0.203	0.070
UNVR	0.433	0.421	0.399	0.453	0.400	0.468

Sales Growth

Company Code	2011	2012	2013	2014	2015	2016
AMFG	0.142	0.101	0.070	0.126	-0.002	0.016
ASII	0.260	0.157	0.040	0.031	-0.017	-0.087
AUTO	0.293	0.124	0.145	0.177	0.092	-0.043
BATA	0.107	0.201	0.118	-0.028	0.053	0.020
DLTA	0.157	0.234	0.054	0.055	-0.026	0.164
DVLA	-0.032	0.209	0.013	0.002	0.183	0.111
GGRM	0.079	0.084	0.131	0.171	0.111	0.176
HMSP	0.261	0.076	0.126	0.072	0.104	0.218
ICBP	0.163	0.086	0.057	0.114	0.078	0.196
IGAR	-0.044	0.085	0.156	0.147	-0.082	0.170
INAI	0.048	0.205	-0.072	0.483	0.457	0.100
INDF	0.104	0.153	0.007	0.102	0.042	0.180
INTP	-0.110	0.245	-0.137	0.070	0.081	0.247
KAEF	0.040	0.075	0.196	0.093	0.164	0.073
KLBF	0.067	0.250	0.030	0.173	0.083	0.085
LION	-0.001	0.244	0.031	0.132	0.291	-0.026
MERK	0.154	0.052	0.012	0.139	0.284	0.071
MLBI	1.273	-0.098	-14.022	0.210	-0.161	0.038
NIPS	0.115	0.213	0.296	0.052	-0.028	0.445
PYFA	0.170	0.154	0.073	-0.020	-0.004	0.090
SKLT	0.093	0.119	0.412	0.096	0.202	0.166
SMSM	0.158	0.110	0.044	0.065	0.027	0.097
TCID	0.095	0.138	0.092	0.003	0.128	0.119
TOTO	0.200	0.197	0.085	0.175	0.110	-0.092
ULTJ	0.066	0.118	0.122	0.132	0.337	0.231
UNVR	0.163	0.192	0.098	0.122	0.057	0.127

Appendix 3

Analysis

Descriptive Statistic

Descriptive Statistics

	n	Minimum	Maximum	Mean	Std. Deviation
CETR	156	.090	.598	.27254	.074241
AC	156	3.000	4.000	3.11538	.320514
AQ	156	.000	1.000	.67949	.468177
SIZE	156	25.494	33.199	28.88019	1.840287
LEV	156	.098	.837	.37117	.175994
PROF	156	.011	.657	.14988	.116712
OCF	156	-.162	.572	.14154	.129984
SG	156	-.161	1.273	.11627	.142682
Valid N (listwise)	156				

Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		156
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.06626001
	Most Extreme Differences	
	Absolute	.078
	Positive	.077
	Negative	-.078
Test Statistic		.078
Asymp. Sig. (2-tailed)		.022 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Multicollinearity Test

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AC	.882	1.134
	AQ	.496	2.017
	SIZE	.662	1.511
	LEV	.842	1.188
	PROF	.260	3.846
	OCF	.283	3.536
	SG	.879	1.138

a. Dependent Variable: CETR

Autocorrelation Test

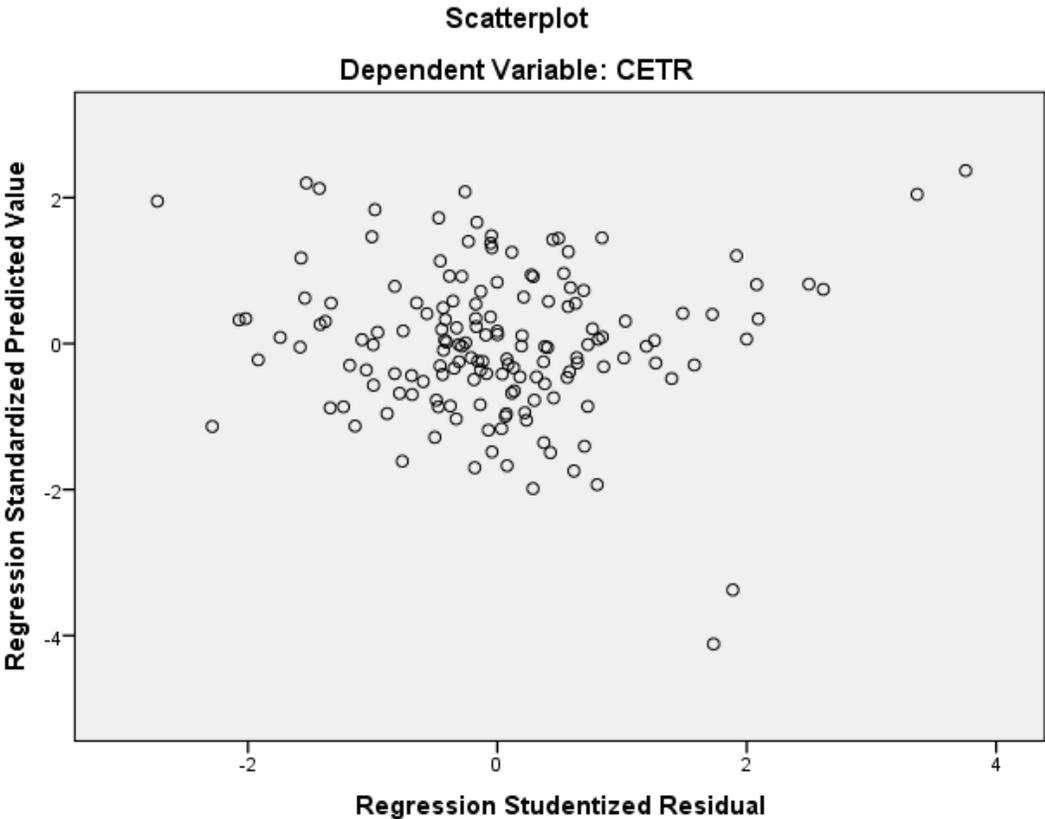
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.451 ^a	.203	.166	.067809	1.714

a. Predictors: (Constant). SG. AC. SIZE. OCF. LEV. AQ. PROF

b. Dependent Variable: CETR

Heteroscedasticity Test



Multiple Linear Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	SG. AC. SIZE. OCF. LEV. AQ. PROF ^b	.	Enter

a. Dependent Variable: CETR

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.451 ^a	.203	.166	.067809	1.714

a. Predictors: (Constant), SG. AC. SIZE. OCF. LEV. AQ. PROF

b. Dependent Variable: CETR

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.174	7	.025	5.400	.000 ^b
	Residual	.681	148	.005		
	Total	.854	155			

a. Dependent Variable: CETR

b. Predictors: (Constant), SG. AC. SIZE. OCF. LEV. AQ. PROF

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.580	.119		4.884	.000		
	AC	.002	.018	.010	.122	.903	.882	1.134
	AQ	.029	.017	.185	1.773	.078	.496	2.017
	SIZE	-.012	.004	-.300	-3.328	.001	.662	1.511
	LEV	.133	.034	.315	3.933	.000	.842	1.188
	PROF	-.260	.092	-.408	-2.836	.005	.260	3.846
	OCF	.077	.079	.135	.981	.328	.283	3.536
	SG	-.050	.041	-.097	-1.234	.219	.879	1.138

a. Dependent Variable: CETR