

# Supply Chains In Indonesia Facing Virus Corona (COVID-19): Models Innovation And Obstacles Faced

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## Abstract

The purpose of this research is to reveal the innovation model and obstacles faced by the Indonesian government in handling the Covid-19 epidemic case. Based on previous research, supply chain management is needed because supply chain disruptions and inventory depletion (such as medical supplies and medical equipment) both in high and low resource settings have catapulted the core components of IPC 8 (environment, materials, and equipment for IPC). The research method used is qualitative, especially phenomenology. The novelty of this research lies in the innovation of the supply chain model and the Covid-19 handling constraints obtained through a series of empirical studies and literature reviews that allow it to be used by decision makers. The results revealed that various innovations to meet the supply chain relating to the handling of Covid-19 have been carried out by the government ranging from the creation of special hospitals, the appointment of public hospitals to the referral hospitals specifically Covid-19, the purchase of medicines from other countries that were imported, a mask development company, increases mask production for state-owned and private companies that produce masks, increases alcohol production, and recruits human resources in the health sector, especially for final year students majoring in health. While various obstacles faced, namely the low awareness of the community to do social distinguish in daily interactions, low awareness of the community to work from home, learn from home, and worship at home and the many people who have to work outside the home when they want to fulfill the day their daily needs, the threat of an unemployment explosion, and fears of social insecurity are also the causes of government difficulties in making locked decisions.

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## I. Introduction

The world is committed to making rapid responses and readiness for the handling of Covid-19 so that the impact is not widespread. Kandel, Chungong, Omaar and Xing (2020) revealed that of 182 countries, only 104 (57%) had the functional capacity to carry out important activities at the national and sub-national level, and 32 (18%) countries had low preparedness and need external resources to control the emerging epidemic events.

As the first country affected by the Covid-19 outbreak, the Chinese government took steps to quickly isolate, quarantine, social distance, and handle society. Ji Y, Peppelenbosch, and Pan (2020) revealed that a significant positive relationship between the Covid-19 incident and mortality was clearly seen in the response of the Chinese community. The rapid increase in the number of infections in China has resulted in insufficient health care resources, followed by an increase in the number of deaths of positive Covid-19 patients. (Hopman, Allegranzi, & Mehtar, 2020)

Based on estimates from the United Nations High Commissioner for Refugees (UNHCR), the United Nations refugee agency, there are more than 41 million internally displaced people and 25 million refugees in the world. Some large scale refugee camps located in poor and developing countries like Africa have limited resources. The health care system in the camps is very fragile and access to care facilities is limited (Roberts, Patel, & McKee, 2012). This phenomenon is very prone to occur and can increase the same case, where the risk of Covid-19 can be transmitted there.

Today's leaders have 2 important responsibilities, namely solving the Covid-19 problem directly and taking precautions (Gates, 2020). To anticipate the surge in mortality rates such as in China, the Indonesian government immediately isolated patients with Covid-19 in designated hospitals, and covid-19 treatment facilities were quickly established to manage as the number of cases in the affected areas increased. Even schools and colleges and meetings were canceled because it could potentially trigger the spread of the epidemic.

These last days, the government has begun to conduct rapid tests in an effort to obtain an early indication of whether someone is positively infected with COVID-19 or not. The Indonesian government prioritizes areas which according to the mapping results

show indications of being vulnerable to COVID-19 infection. Tests will be carried out from house to house in priority areas.

The government is committed to continue to work very hard as a form of seriousness in handling Covid 19. The commitment was formulated through making public policies (strong public health policy response) related to the handling of the covid-19 outbreak in the form of supply chain management of drugs and medical devices.

Minimum requirements as a first step in handling and prevention must be implemented. With the aim of building additional important elements from IPC's core components in stages based on regional conditions (Hopman, Allegranzi, & Mehtar, 2020). Based on the core components of the World Health Organization (WHO), the WHO minimum infection prevention and control (IPC) requirements are mandatory at the national level and health facilities to provide minimal protection and safety for positive patients Covid-19, health care workers, and visitors (WHO, 2020).

This research is motivated by supply chain disruptions and depletion of supplies (such as medical supplies and medical equipment) in both high and low resource settings that have connected IPC 8 core components (environment, materials, and equipment for IPC). The global community is demanded to increase laboratory capacity and other surveillance capabilities, increase the readiness of the health system to care for, and improve communication and coordination and implementation strategies (Baltimoe, 2019). Procurement and supply chain management must also be improved to ensure adequate stock of essential drugs and personal protective equipment and to allow equitable access to new diagnoses, therapies and vaccines during the epidemic emergency (WHO, 2020)

The occurrence of panic buying and irrational use of personal protective equipment (PPE) have caused an inadequate supply of N95 respirators, and this deficiency can lead to devastating consequences for the management of tuberculosis that is resistant to various drugs (Hopman, Allegranzi, & Mehtar, 2020). In this case, the government must provide clear guidance on the use of PE and act acceleratively to secure adequate supply and stock. Therefore, supply chain management for medicines and medical devices is needed. Previous research that addressed the issue of supply chain management and Covid-19 has not yet touched deeply on the obstacles and innovation models that can be carried out to deal with this epidemic problem. The research seeks to express this goal, which is to innovate models and explain the obstacles currently experienced by the Indonesian government.

## II. Material and Method

Supply chain network design is a modeling approach that is proven to significantly reduce supply chain costs and can improve service quality by better aligning supply

chain strategies that will be carried out by all parties involved in co-19 handling. Whereas epidemic outbreaks are special cases of supply chain risk (SC) which are specifically characterized by long-term disruption, the spread of disruption, and high uncertainty. A series of studies conducted by Ivanov (2020) revealed that the time of closure of facilities in different echelons, the waiting time, the speed of the spread of the epidemic, and the duration of upstream and downstream disruption in SC became the main factors determining the impact of epidemic outbreaks on SC performance. This approach can help identify successful and wrong elements of risk mitigation or preparedness and recovery policies in epidemic outbreaks. Thus, decision makers can predict the operational and long-term effects of epidemic outbreaks on SC and develop appropriate SC epidemic plans.

Selmi and Murray (2016) explain that the global need to accelerate progress towards achieving the Sendai Framework priorities and targets for disaster risk reduction adopted by member states of the United Nations (UN) in 2015. The Sendai Framework complements the International Health Regulation (IHR) with integrating infrastructure, climate change and economic considerations into disaster management plans and promoting inclusive policies that are designed to protect vulnerable populations during the mitigation, preparedness, response and recovery phases. The Sendai Framework adopts an all-hazard approach to enhance international, regional, national and local resilience to withstand a broad spectrum of disasters, including epidemic, pandemic and epizootic problems. Clearly, preparedness for a new epidemic requires strengthening health systems and developing response plans that take into account various socio-economic, environmental, political, and institutional factors that can support or hinder emergency management efforts (Lee, et al, 2020).

Supply chain management has become the dominant disaster mitigation paradigm in recent periods. This decision model is used to solve supply chain related problems in an emergency, including an anomaly in the case of the outbreak of Covid-19. Therefore, various policies regarding supply chain management of all products used for the war against Covid-19 are very important to do. This is in line with research conducted by Kozlenkova (2015) which states that Supply Chain Management (SCM) is used to indicate needs in the integration process from end use to original suppliers. Sometimes in carrying out the integration process, new innovations are needed. This is because supply chain management that is not well integrated can lead to poor decision making, opportunistic behavior, and loss of objectivity. Therefore, policies must be based on good integration so that supply chain decision making is truly on target.

The existential supply management philosophy is to integrate the flow of materials, information and products from the initial supplier to the end customer. Through supply chain management it is expected that the ration of drugs, materials and medical devices to / and between regions can be done fairly and transparently, because it is closely related to the potential, conditions and needs of different regions.

Ji Y, Peppelenbosch, and Pan (2020) revealed that the association of deaths with health care resources should provide guidance for resource-limited areas on how and whenever to prepare for the use of local outbreaks. In addition, lessons learned in the 2003 outbreak of acute respiratory syndrome viral corona (SARS-CoV) aimed at strengthening people's immune systems will be very helpful.

When a region is able to implement decentralized supply chain management it means it is very good, because it can help the central government. In other words, the financial capacity of the region is sufficient to finance the supply chain of drugs, materials and medical devices in order to fight co-19. In a very vulnerable position like this, dependence on the center must be as minimal as possible. The less transfer and drugs and medical devices from the center, the higher the level of independence of an area.

In regions with lower levels of independence, it is necessary to provide early distribution of drugs and medical devices to reduce imbalances with very urgent demand in large numbers. Thus, areas with low local income need to be assisted in financing expenditures related to the co-19 pandemic. Such conditions will also close the opportunity for differences in the role of regions in carrying out government functions and services in handling Covid-19.

To overcome the unequal financial capability between regions in financing Covid-19's handling needs, it is expected to be overcome through vertical and horizontal coordination between one regional government and another regional government.

Aside from being a disaster management instrument, supply chain management (MRP) also aims to accelerate the distribution of medicines and medical devices to the regions. MRP is also able to increase the convergence of the quality of Covid-19 handlers in all regions well. Thus, MRP will also have a significant influence in increasing the speed of convergence of service quality in the Covid-19 case in all regions.

In this case, the regional government has the authority to make policies that are directed to develop regional competence in handling co-19 issues. In addition, the MRP must be used as well as possible by the regional government in handling Covid-19 because the regions are the most aware of the needs, conditions, and situation of the Covid-19 pandemic.

This research method is qualitative, especially phenomenology. This method was chosen because it intends to describe the various supply chain innovations that have been carried out by the Government and the Indonesian community in dealing with co-19. The study was conducted in February to the end of March 2020. Data collection was carried out using two methods, namely participatory observation and in-depth interviews in a semi-structured manner (Basrowi and Suwandi, 2006). Observation of participation was carried out on various information made by all parties, especially

those reported through the mass media. Observation of participation was also carried out in the community, especially the people of Jakarta and Lampung. Semi-structured interviews were conducted with communities in Cempaka Baru, Kemayoran District, Central Jakarta, Indonesia, and the Bandar Lampung community. The data analysis process uses the interaction method suggested by Miles and Huberman (2014) starting from data collection, data classification, data filtering, and drawing conclusions.

### **III. Results and Discussion**

#### **3.1. Drug Supply Chain Configuration and Medical Devices**

The Covid-19 epidemic is a reminder of the importance of maintaining an increased and sustained commitment to global public health preparedness. The world does not need more evidence of health, social, economic and environmental problems that arise when humans fail to invest adequately in global health security. What is needed is prioritizing, funding, and implementing preparedness interventions. (Jacobsen, 2020).

The dialectical model can be applied in explaining the role of networks in the policy process for handling the Covid-19 outbreak. The outcome of the Covid-19 outbreak policy process is determined by the dialectical relationship between structure and institutions, networks and contexts, networks and outcomes, and problem orientation of the actors in the process of handling the Covid-19 outbreak.

The results of government policy in handling Covid-19 are the result of a process of bargaining and contestation of greater community interests by utilizing all resources owned by the central and regional governments. In this case, a neat network of policy implementers and all are expected to be in a position ready for hard work are very relevant in the implementation of supply chain management tools and materials handling Covid-19.

This dialect model is expected to be able to explain why the supply chain policy in handling Covid-19 can continue to change, following various innovations suggested by external parties in this case WHO and innovations carried out by internal government and its staff? That happened because, all of them were oriented towards national safety. Communities can benefit when the country can run supply chain network scenarios, evaluate and proactively implement positive change in response to all possible Covid-19 outbreaks.

Countries can also introduce new products that are being purchased, or change demand patterns, add new sources of supply, and increase the amount of goods that are needed by the state. For example, when in the last days Jokowi ordered two million Avigan and 3 million chloroquine, to treat co-19 patients.

In this case the president has done a quick supply chain planning so that it is also responded quickly by medical staff, hospitals, and all parties who can help take concrete steps to resolve the Corona problem in Indonesia. This is where has happened with what is called dynamic supply chain management dialectics.

In the process of supply chain management of medicines and medical devices, an integral approach is needed. Storage, transportation, inventory, ordering and the amount of medicines and medical devices must be sufficient as needed by the community at this time. Even to build an optimal and effective management system, good planning, supply, fabrication, delivery, and sorting of goods must be carried out. This is done to minimize human error, facilitate distribution, reduce technical problems, reduce transportation and distribution costs, and maintain the quality of medicines and medical equipment needed by the community.

The aspect of speed taken by the President in making supply chain management decisions is awaited by the public. It also shows that, supply chain management is not stagnant, but there is always innovation by finding a variety of valid information that can be used to solve covid-19.

The steps taken by the president show that there are seven dimensions in the management of the Covid-19 drug supply chain, namely: 1) the president as an actor, 2) the function of the president as the top manager in supply chain management planning, 3) the governance structure that has the power to order and carry out the people's mandate , 4) the existence of instructions from the President to all parties involved so that all patients can be handled properly, 5) the existence of various codes of conduct in managing disasters in a directed and integrated manner; 6) there is a relationship between the government, Covid-19 handling task force, producers, distributors, and patients, and 7) the Government's strategy in handling Covid-19 quickly, precisely, and directed.

We can read his book Marsh & Smith (2000) who has introduced a dialectical model in supply chain management as an analysis in the process of making public policies that are disaster emergency. This model clearly analyzes not only the actors making supply chain management planning, the relations between actors, and the interests of the community, but also the transformation of policies in the face of unpredictable dynamic nature of disasters.

Thus, this dialectical model can be applied by the government and agencies-all parties involved-from producers, distributors, catalyts, to the user actors in this case the affected communities.

Hard work to fulfill the supply chain was also carried out by the Governor of Central Java, which has been trying to increase Alcohol production in Wonogiri, Central Java to 3 million liters per day, and intends to build a mask factory in Brebes, given the high demand.

Hard work to fulfill the supply chain of inpatients and isolation rooms was also carried out by the Minister of State-Owned Enterprises Erick Thohir and Ministry of Public Works Minister Basuki Hadimuljono, as well as the Chief Executive of the Task Force for the Covid-19 Handling Acceleration Handling Task Force which swiftly transformed the Athlete House in Kemayoran into place of health care for patients in care.

Various experts, ranging from building experts, sanitation experts, health engineers, electrical engineers, Air Conditioner (AC) experts, heat shock experts, and various experts struggling to set up a Corona specialty hospital on Galang Island, Batam, Riau Islands. The existence of the hospital is expected to be an answer to the needs of the community in facing the Corona Virus threat. The hospital is also expected to be a center for observation and isolation of Covid-19 patients.

Creative efforts were also carried out by the Mayor of Surabaya who created a Disinfectant Chamber to sterilize all limbs from Corona Virus. The effort was made to fight the Corona Virus that has become epidemic in Surabaya.

In addition, the development of digital technology can be utilized as an effort to maintain the supply chain by making various policies related to the valid data needed. This is to prevent policy irregularities related to the validity of the data both the amount of medicine and medical devices as well as other data needed during the Covid-19 handling. Digitalisation has the potential to affect the majority of environmental quality parameters and encourage improvement in quality of life (Sharifullin, et al., 2019; Miraz, Hye, & Habib, 2019). Support from accounting information systems using technology is also needed to reduce uncertainty, negative perspectives from the public regarding the handling of Covid-19, support decisions that will be taken by the government as a strategic effort, and encourage, make scheduling and good control of the practices that have been carried out (Haddouch, Beidouri, & Oumami, 2019). Sari et al. (2019) revealed that a good accounting information system is one of the effective strategies in maintaining the quality of the supply chain. With information systems, even emergency planning can be well integrated. This is to avoid communication errors and fraud. Halal authenticity and integrity in a product is very important to be a prerequisite in determining the potential and dynamic supply chain network.(Majid, 2019)

### **3.2. Indigenous and Exogenous Factors in MRP**

There are two explanatory factors to describe the relationship between the network created by the Government and the supply chain management context, namely indigenous and exogenous factors. Indigenous factors that can influence policy are ideology, politics, and the availability of resources (material and Human Resources

(HR) -health). Exogenous factors include global economic base and new knowledge in the form of new findings related to Covid-19 drugs.

The results of policies made by the Jokowi government also affect the form of policy networks, both direct and indirect. In other words, supply chain management in the Covid-19 disaster response process was also motivated by the structural interests of the state in facilitating the community when handling the Covid-19 outbreak as well as being a very strategic learning process for the community and all parties affected by the Covid-19 outbreak.

Thus, government policies in supply chain management in the process of handling the Covid-19 outbreak disaster could affect various exogenous factors. First, the results of policies made by the government can cause changes in the network or the balance of resources within it. For example, the call of the Minister of Education and Culture who summoned final-year health students to volunteer to handle the Covid-19 case will greatly influence other policies, including the HR-Health supply chain.

Second, the results of policies in supply chain management can also have an impact on broader social structures that place the interests of saving human lives above economic interests and state revenues from tax and non-tax.

Third, the results of policies in supply chain management can also affect the standard operational procedures used by medical and paramedical personnel, as well as other supporting staff, including the task force for handling Covid-19 and the Indonesian Armed Forces-Indonesian Republic Police. Here it is very clear, that there has been a reciprocal relationship (dialectics) in supply chain management based on policies made by the Government. Hopefully, supply chain management in handling Covid-19 is increasingly being carried out perfectly by the government and its staff, so that it is able to control the spread of the Corona virus (Covid-19).

### **3.3. Configuration of Supply Chain in Human Resources for Health**

The Covid-19 pandemic outbreak has prompted the Government to design and reconfigure supply chain management for drugs and medical devices, as well as HR-health. The consequences of various changes in supply chain management will lead to an increase in the complexity of actions, supply chain channels, network of parties involved in the supply process, and distribution facilities. All this, of course, will make supply chain management planning more complicated and complex, in line with the level of vulnerability of the Covid-19 outbreak.

The initial goal of establishing the HR-Health supply chain management policy is to provide protection to the community, so as not to be further exposed to the differences in Covid-19. When already exposed it is expected to be treated properly, and can recover.

The President interacted intensely with the ministers, the House of Representatives, the Regional Representatives Council, the governor, and the Regent in planning and refining the HR-Health supply chain management policy design for the handling of the Covid-19 Plague. Consultation was also carried out with non-governmental actors involved in the HR-Health supply chain management policy making process starting from representatives of academics, the media, and various related parties. They are expected to play an optimal role, so HR-Health supply chain management is not entirely the responsibility of the Government, but also the responsibility of the community together.

It is intended that the Covid-19 handling process can be carried out comprehensively and can help all people in need. Actors outside the government must be determined to fight for humanitarian interests. Thus, HR-Health supply chain management policies in handling Covid-19 can help the government overcome the Covid-19 outbreak.

The Minister of Education and Culture's appeal, Nadim Makarim, for the final year health student participants to volunteer for Covid-19 needs to be happy by all elements. At present, Indonesia is demanding their knowledge and energy to be involved with the virus with Corona. This appeal is very appropriate to be discussed, because the number of medical HR and medical personnel in Indonesia is still very limited, plus in the 3T areas (frontier, outermost, and underdeveloped).

The number of doctors in Indonesia according to 2018 Ministry of Health data is 134,459 general practitioners tested throughout Indonesia. With a population of 265 million, it means that each doctor serves an average of 1,900 residents. More than half of doctors in Indonesia, practice in Java reached 78,837 general practitioners. Position in West Java is 20,929 doctors, Special Capital Region of Jakarta 18,905 doctors, East Java, 15,948 doctors, Central Java 12,358 doctors, North Sumatra 10,541 doctors. Meanwhile in other regions such as West Sulawesi there were only 154 doctors, 244 North Kalimantan doctors, 251 North doctors, 309 West Papua doctors, 319 Gorontalo doctors; Bangka Belitung only 499 doctors (Ministry of health, 2018).

With such conditions, the number of patients expected by Covid-19 did not increase dramatically. Hopefully, however, if there are things that need to be improved, in the amount needed by patients, doctors from the area can be temporarily transferred to areas that are in dire need.

#### **IV. Conclusion**

Various innovations to meet various supply chains related to the handling of Covid-19 have been carried out by the government ranging from the creation of special hospitals, the appointment of public hospitals to Covid-19 special referral hospitals, the purchase of drugs from other countries by importation, the construction of mask

manufacturing companies , increasing the production of masks for state-owned enterprises and private companies that produce masks, increasing alcohol production, and recruiting human resources in the health sector, especially for students majoring in health at the final level.

Other innovations made by ministers, governors, mayors, regents, community leaders, academics, musicians, artists, and various professions vary greatly, so that all innovations in order to meet the supply chain in the health sector ranging from medicine, materials, and medical devices , including the supply of food for health workers the amount and variety is very much. With this hope, hopefully Covid-19 in Indonesia can be resolved soon.

Various obstacles faced, namely the low awareness of the community to do social distancing in daily interactions. Another obstacle is the low awareness of the community to work from home, learn from home, and worship at home. The large number of people who have to work outside the home when they want to meet their daily needs, the threat of exploding unemployment, and fears of social insecurity are also the causes of the government's difficulties in making lock-down decisions.

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The world is committed to making rapid responses and readiness for the handling of Covid-19 so that the impact is not widespread. Kandel, Chungong, Omaar and Xing (2020) revealed that of 182 countries, only 104 (57%) had the functional capacity to carry out important activities at the national and sub-national level, and 32 (18%) countries had low preparedness and need external resources to control the emerging epidemic events.

As the first country affected by the Covid-19 outbreak, the Chinese government took steps to quickly isolate, quarantine, social distance, and handle society. Ji Y, Peppelenbosch, and Pan (2020) revealed that a significant positive relationship between the Covid-19 incident and mortality was clearly seen in the response of the Chinese community. The rapid increase in the number of infections in China has resulted in insufficient health care resources, followed by an increase in the number of deaths of positive Covid-19 patients. (Hopman, Allegranzi, & Mehtar, 2020)

Based on estimates from the United Nations High Commissioner for Refugees (UNHCR), the United Nations refugee agency, there are more than 41 million internally displaced people and 25 million refugees in the world. Some large scale refugee camps located in poor and developing countries like Africa have limited resources. The health care system in the camps is very fragile and access to care facilities is limited (Roberts, Patel, & McKee, 2012). This phenomenon is very prone to occur and can increase the same case, where the risk of Covid-19 can be transmitted there.

Today's leaders have 2 important responsibilities, namely solving the Covid-19 problem directly and taking precautions (Gates, 2020). To anticipate the surge in mortality rates such as in China, the Indonesian government immediately isolated patients with Covid-19 in designated hospitals, and covid-19 treatment facilities were quickly established to manage as the number of cases in the affected areas increased. Even schools and colleges and meetings were canceled because it could potentially trigger the spread of the epidemic.

These last days, the government has begun to conduct rapid tests in an effort to obtain an early indication of whether someone is positively infected with COVID-19 or not. The Indonesian government prioritizes areas which according to the mapping results

show indications of being vulnerable to COVID-19 infection. Tests will be carried out from house to house in priority areas.

The government is committed to continue to work very hard as a form of seriousness in handling Covid 19. The commitment was formulated through making public policies (strong public health policy response) related to the handling of the covid-19 outbreak in the form of supply chain management of drugs and medical devices.

Minimum requirements as a first step in handling and prevention must be implemented. With the aim of building additional important elements from IPC's core components in stages based on regional conditions (Hopman, Allegranzi, & Mehtar, 2020). Based on the core components of the World Health Organization (WHO), the WHO minimum infection prevention and control (IPC) requirements are mandatory at the national level and health facilities to provide minimal protection and safety for positive patients Covid-19, health care workers, and visitors (WHO, 2020).

This research is motivated by supply chain disruptions and depletion of supplies (such as medical supplies and medical equipment) in both high and low resource settings that have connected IPC 8 core components (environment, materials, and equipment for IPC). The global community is demanded to increase laboratory capacity and other surveillance capabilities, increase the readiness of the health system to care for, and improve communication and coordination and implementation strategies (Baltimoe, 2019). Procurement and supply chain management must also be improved to ensure adequate stock of essential drugs and personal protective equipment and to allow equitable access to new diagnoses, therapies and vaccines during the epidemic emergency (WHO, 2020)

The occurrence of panic buying and irrational use of personal protective equipment (PPE) have caused an inadequate supply of N95 respirators, and this deficiency can lead to devastating consequences for the management of tuberculosis that is resistant to various drugs (Hopman, Allegranzi, & Mehtar, 2020). In this case, the government must provide clear guidance on the use of PE and act acceleratively to secure adequate supply and stock. Therefore, supply chain management for medicines and medical devices is needed. Previous research that addressed the issue of supply chain management and Covid-19 has not yet touched deeply on the obstacles and innovation models that can be carried out to deal with this epidemic problem. The research seeks to express this goal, which is to innovate models and explain the obstacles currently experienced by the Indonesian government.

## II. Material and Method

Supply chain network design is a modeling approach that is proven to significantly reduce supply chain costs and can improve service quality by better aligning supply

chain strategies that will be carried out by all parties involved in co-19 handling. Whereas epidemic outbreaks are special cases of supply chain risk (SC) which are specifically characterized by long-term disruption, the spread of disruption, and high uncertainty. A series of studies conducted by Ivanov (2020) revealed that the time of closure of facilities in different echelons, the waiting time, the speed of the spread of the epidemic, and the duration of upstream and downstream disruption in SC became the main factors determining the impact of epidemic outbreaks on SC performance. This approach can help identify successful and wrong elements of risk mitigation or preparedness and recovery policies in epidemic outbreaks. Thus, decision makers can predict the operational and long-term effects of epidemic outbreaks on SC and develop appropriate SC epidemic plans.

Selmi and Murray (2016) explain that the global need to accelerate progress towards achieving the Sendai Framework priorities and targets for disaster risk reduction adopted by member states of the United Nations (UN) in 2015. The Sendai Framework complements the International Health Regulation (IHR) with integrating infrastructure, climate change and economic considerations into disaster management plans and promoting inclusive policies that are designed to protect vulnerable populations during the mitigation, preparedness, response and recovery phases. The Sendai Framework adopts an all-hazard approach to enhance international, regional, national and local resilience to withstand a broad spectrum of disasters, including epidemic, pandemic and epizootic problems. Clearly, preparedness for a new epidemic requires strengthening health systems and developing response plans that take into account various socio-economic, environmental, political, and institutional factors that can support or hinder emergency management efforts (Lee, et al, 2020).

Supply chain management has become the dominant disaster mitigation paradigm in recent periods. This decision model is used to solve supply chain related problems in an emergency, including an anomaly in the case of the outbreak of Covid-19. Therefore, various policies regarding supply chain management of all products used for the war against Covid-19 are very important to do. This is in line with research conducted by Kozlenkova (2015) which states that Supply Chain Management (SCM) is used to indicate needs in the integration process from end use to original suppliers. Sometimes in carrying out the integration process, new innovations are needed. This is because supply chain management that is not well integrated can lead to poor decision making, opportunistic behavior, and loss of objectivity. Therefore, policies must be based on good integration so that supply chain decision making is truly on target.

The existential supply management philosophy is to integrate the flow of materials, information and products from the initial supplier to the end customer. Through supply chain management it is expected that the ration of drugs, materials and medical devices to / and between regions can be done fairly and transparently, because it is closely related to the potential, conditions and needs of different regions.

Ji Y, Peppelenbosch, and Pan (2020) revealed that the association of deaths with health care resources should provide guidance for resource-limited areas on how and whenever to prepare for the use of local outbreaks. In addition, lessons learned in the 2003 outbreak of acute respiratory syndrome viral corona (SARS-CoV) aimed at strengthening people's immune systems will be very helpful.

When a region is able to implement decentralized supply chain management it means it is very good, because it can help the central government. In other words, the financial capacity of the region is sufficient to finance the supply chain of drugs, materials and medical devices in order to fight co-19. In a very vulnerable position like this, dependence on the center must be as minimal as possible. The less transfer and drugs and medical devices from the center, the higher the level of independence of an area.

In regions with lower levels of independence, it is necessary to provide early distribution of drugs and medical devices to reduce imbalances with very urgent demand in large numbers. Thus, areas with low local income need to be assisted in financing expenditures related to the co-19 pandemic. Such conditions will also close the opportunity for differences in the role of regions in carrying out government functions and services in handling Covid-19.

To overcome the unequal financial capability between regions in financing Covid-19's handling needs, it is expected to be overcome through vertical and horizontal coordination between one regional government and another regional government.

Aside from being a disaster management instrument, supply chain management (MRP) also aims to accelerate the distribution of medicines and medical devices to the regions. MRP is also able to increase the convergence of the quality of Covid-19 handlers in all regions well. Thus, MRP will also have a significant influence in increasing the speed of convergence of service quality in the Covid-19 case in all regions.

In this case, the regional government has the authority to make policies that are directed to develop regional competence in handling co-19 issues. In addition, the MRP must be used as well as possible by the regional government in handling Covid-19 because the regions are the most aware of the needs, conditions, and situation of the Covid-19 pandemic.

This research method is qualitative, especially phenomenology. This method was chosen because it intends to describe the various supply chain innovations that have been carried out by the Government and the Indonesian community in dealing with co-19. The study was conducted in February to the end of March 2020. Data collection was carried out using two methods, namely participatory observation and in-depth interviews in a semi-structured manner (Basrowi and Suwandi, 2006). Observation of participation was carried out on various information made by all parties, especially

those reported through the mass media. Observation of participation was also carried out in the community, especially the people of Jakarta and Lampung. Semi-structured interviews were conducted with communities in Cempaka Baru, Kemayoran District, Central Jakarta, Indonesia, and the Bandar Lampung community. The data analysis process uses the interaction method suggested by Miles and Huberman (2014) starting from data collection, data classification, data filtering, and drawing conclusions.

### **III. Results and Discussion**

#### **3.1. Drug Supply Chain Configuration and Medical Devices**

The Covid-19 epidemic is a reminder of the importance of maintaining an increased and sustained commitment to global public health preparedness. The world does not need more evidence of health, social, economic and environmental problems that arise when humans fail to invest adequately in global health security. What is needed is prioritizing, funding, and implementing preparedness interventions. (Jacobsen, 2020).

The dialectical model can be applied in explaining the role of networks in the policy process for handling the Covid-19 outbreak. The outcome of the Covid-19 outbreak policy process is determined by the dialectical relationship between structure and institutions, networks and contexts, networks and outcomes, and problem orientation of the actors in the process of handling the Covid-19 outbreak.

The results of government policy in handling Covid-19 are the result of a process of bargaining and contestation of greater community interests by utilizing all resources owned by the central and regional governments. In this case, a neat network of policy implementers and all are expected to be in a position ready for hard work are very relevant in the implementation of supply chain management tools and materials handling Covid-19.

This dialect model is expected to be able to explain why the supply chain policy in handling Covid-19 can continue to change, following various innovations suggested by external parties in this case WHO and innovations carried out by internal government and its staff? That happened because, all of them were oriented towards national safety. Communities can benefit when the country can run supply chain network scenarios, evaluate and proactively implement positive change in response to all possible Covid-19 outbreaks.

Countries can also introduce new products that are being purchased, or change demand patterns, add new sources of supply, and increase the amount of goods that are needed by the state. For example, when in the last days Jokowi ordered two million Avigan and 3 million chloroquine, to treat co-19 patients.

In this case the president has done a quick supply chain planning so that it is also responded quickly by medical staff, hospitals, and all parties who can help take concrete steps to resolve the Corona problem in Indonesia. This is where has happened with what is called dynamic supply chain management dialectics.

In the process of supply chain management of medicines and medical devices, an integral approach is needed. Storage, transportation, inventory, ordering and the amount of medicines and medical devices must be sufficient as needed by the community at this time. Even to build an optimal and effective management system, good planning, supply, fabrication, delivery, and sorting of goods must be carried out. This is done to minimize human error, facilitate distribution, reduce technical problems, reduce transportation and distribution costs, and maintain the quality of medicines and medical equipment needed by the community.

The aspect of speed taken by the President in making supply chain management decisions is awaited by the public. It also shows that, supply chain management is not stagnant, but there is always innovation by finding a variety of valid information that can be used to solve covid-19.

The steps taken by the president show that there are seven dimensions in the management of the Covid-19 drug supply chain, namely: 1) the president as an actor, 2) the function of the president as the top manager in supply chain management planning, 3) the governance structure that has the power to order and carry out the people's mandate , 4) the existence of instructions from the President to all parties involved so that all patients can be handled properly, 5) the existence of various codes of conduct in managing disasters in a directed and integrated manner; 6) there is a relationship between the government, Covid-19 handling task force, producers, distributors, and patients, and 7) the Government's strategy in handling Covid-19 quickly, precisely, and directed.

We can read his book Marsh & Smith (2000) who has introduced a dialectical model in supply chain management as an analysis in the process of making public policies that are disaster emergency. This model clearly analyzes not only the actors making supply chain management planning, the relations between actors, and the interests of the community, but also the transformation of policies in the face of unpredictable dynamic nature of disasters.

Thus, this dialectical model can be applied by the government and agencies-all parties involved-from producers, distributors, catalyts, to the user actors in this case the affected communities.

Hard work to fulfill the supply chain was also carried out by the Governor of Central Java, which has been trying to increase Alcohol production in Wonogiri, Central Java to 3 million liters per day, and intends to build a mask factory in Brebes, given the high demand.

Hard work to fulfill the supply chain of inpatients and isolation rooms was also carried out by the Minister of State-Owned Enterprises Erick Thohir and Ministry of Public Works Minister Basuki Hadimuljono, as well as the Chief Executive of the Task Force for the Covid-19 Handling Acceleration Handling Task Force which swiftly transformed the Athlete House in Kemayoran into place of health care for patients in care.

Various experts, ranging from building experts, sanitation experts, health engineers, electrical engineers, Air Conditioner (AC) experts, heat shock experts, and various experts struggling to set up a Corona specialty hospital on Galang Island, Batam, Riau Islands. The existence of the hospital is expected to be an answer to the needs of the community in facing the Corona Virus threat. The hospital is also expected to be a center for observation and isolation of Covid-19 patients.

Creative efforts were also carried out by the Mayor of Surabaya who created a Disinfectant Chamber to sterilize all limbs from Corona Virus. The effort was made to fight the Corona Virus that has become epidemic in Surabaya.

In addition, the development of digital technology can be utilized as an effort to maintain the supply chain by making various policies related to the valid data needed. This is to prevent policy irregularities related to the validity of the data both the amount of medicine and medical devices as well as other data needed during the Covid-19 handling. Digitalisation has the potential to affect the majority of environmental quality parameters and encourage improvement in quality of life (Sharifullin, et al., 2019; Miraz, Hye, & Habib, 2019). Support from accounting information systems using technology is also needed to reduce uncertainty, negative perspectives from the public regarding the handling of Covid-19, support decisions that will be taken by the government as a strategic effort, and encourage, make scheduling and good control of the practices that have been carried out (Haddouch, Beidouri, & Oumami, 2019). Sari et al. (2019) revealed that a good accounting information system is one of the effective strategies in maintaining the quality of the supply chain. With information systems, even emergency planning can be well integrated. This is to avoid communication errors and fraud. Halal authenticity and integrity in a product is very important to be a prerequisite in determining the potential and dynamic supply chain network.(Majid, 2019)

### **3.2. Indigenous and Exogenous Factors in MRP**

There are two explanatory factors to describe the relationship between the network created by the Government and the supply chain management context, namely indigenous and exogenous factors. Indigenous factors that can influence policy are ideology, politics, and the availability of resources (material and Human Resources

(HR) -health). Exogenous factors include global economic base and new knowledge in the form of new findings related to Covid-19 drugs.

The results of policies made by the Jokowi government also affect the form of policy networks, both direct and indirect. In other words, supply chain management in the Covid-19 disaster response process was also motivated by the structural interests of the state in facilitating the community when handling the Covid-19 outbreak as well as being a very strategic learning process for the community and all parties affected by the Covid-19 outbreak.

Thus, government policies in supply chain management in the process of handling the Covid-19 outbreak disaster could affect various exogenous factors. First, the results of policies made by the government can cause changes in the network or the balance of resources within it. For example, the call of the Minister of Education and Culture who summoned final-year health students to volunteer to handle the Covid-19 case will greatly influence other policies, including the HR-Health supply chain.

Second, the results of policies in supply chain management can also have an impact on broader social structures that place the interests of saving human lives above economic interests and state revenues from tax and non-tax.

Third, the results of policies in supply chain management can also affect the standard operational procedures used by medical and paramedical personnel, as well as other supporting staff, including the task force for handling Covid-19 and the Indonesian Armed Forces-Indonesian Republic Police. Here it is very clear, that there has been a reciprocal relationship (dialectics) in supply chain management based on policies made by the Government. Hopefully, supply chain management in handling Covid-19 is increasingly being carried out perfectly by the government and its staff, so that it is able to control the spread of the Corona virus (Covid-19).

### **3.3. Configuration of Supply Chain in Human Resources for Health**

The Covid-19 pandemic outbreak has prompted the Government to design and reconfigure supply chain management for drugs and medical devices, as well as HR-health. The consequences of various changes in supply chain management will lead to an increase in the complexity of actions, supply chain channels, network of parties involved in the supply process, and distribution facilities. All this, of course, will make supply chain management planning more complicated and complex, in line with the level of vulnerability of the Covid-19 outbreak.

The initial goal of establishing the HR-Health supply chain management policy is to provide protection to the community, so as not to be further exposed to the differences in Covid-19. When already exposed it is expected to be treated properly, and can recover.

The President interacted intensely with the ministers, the House of Representatives, the Regional Representatives Council, the governor, and the Regent in planning and refining the HR-Health supply chain management policy design for the handling of the Covid-19 Plague. Consultation was also carried out with non-governmental actors involved in the HR-Health supply chain management policy making process starting from representatives of academics, the media, and various related parties. They are expected to play an optimal role, so HR-Health supply chain management is not entirely the responsibility of the Government, but also the responsibility of the community together.

It is intended that the Covid-19 handling process can be carried out comprehensively and can help all people in need. Actors outside the government must be determined to fight for humanitarian interests. Thus, HR-Health supply chain management policies in handling Covid-19 can help the government overcome the Covid-19 outbreak.

The Minister of Education and Culture's appeal, Nadim Makarim, for the final year health student participants to volunteer for Covid-19 needs to be happy by all elements. At present, Indonesia is demanding their knowledge and energy to be involved with the virus with Corona. This appeal is very appropriate to be discussed, because the number of medical HR and medical personnel in Indonesia is still very limited, plus in the 3T areas (frontier, outermost, and underdeveloped).

The number of doctors in Indonesia according to 2018 Ministry of Health data is 134,459 general practitioners tested throughout Indonesia. With a population of 265 million, it means that each doctor serves an average of 1,900 residents. More than half of doctors in Indonesia, practice in Java reached 78,837 general practitioners. Position in West Java is 20,929 doctors, Special Capital Region of Jakarta 18,905 doctors, East Java, 15,948 doctors, Central Java 12,358 doctors, North Sumatra 10,541 doctors. Meanwhile in other regions such as West Sulawesi there were only 154 doctors, 244 North Kalimantan doctors, 251 North doctors, 309 West Papua doctors, 319 Gorontalo doctors; Bangka Belitung only 499 doctors (Ministry of health, 2018).

With such conditions, the number of patients expected by Covid-19 did not increase dramatically. Hopefully, however, if there are things that need to be improved, in the amount needed by patients, doctors from the area can be temporarily transferred to areas that are in dire need.

#### **IV. Conclusion**

Various innovations to meet various supply chains related to the handling of Covid-19 have been carried out by the government ranging from the creation of special hospitals, the appointment of public hospitals to Covid-19 special referral hospitals, the purchase of drugs from other countries by importation, the construction of mask

manufacturing companies , increasing the production of masks for state-owned enterprises and private companies that produce masks, increasing alcohol production, and recruiting human resources in the health sector, especially for students majoring in health at the final level.

Other innovations made by ministers, governors, mayors, regents, community leaders, academics, musicians, artists, and various professions vary greatly, so that all innovations in order to meet the supply chain in the health sector ranging from medicine, materials, and medical devices , including the supply of food for health workers the amount and variety is very much. With this hope, hopefully Covid-19 in Indonesia can be resolved soon.

Various obstacles faced, namely the low awareness of the community to do social distancing in daily interactions. Another obstacle is the low awareness of the community to work from home, learn from home, and worship at home. The large number of people who have to work outside the home when they want to meet their daily needs, the threat of exploding unemployment, and fears of social insecurity are also the causes of the government's difficulties in making lock-down decisions.

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## The Effect of Short Term Debt To Profitability In The Pratama Clinic of Kosasih Rajabasa (Kosasih Group) Period 2016-2018

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### Abstract

This study aims to determine whether debt, both simultaneously and partially, affects the profitability of the Pratama Rajabasa Primary Clinic (Kosasih Group) for the 2016-2018 periods. After conducting a regression analysis using SPSS version 23.0 it can be seen that the constant value of 12.725, which means if short-term debt (X) equals zero or fixed, then profitability (Net Profit Margin) also remains at 12.725. The coefficient of short-term debt (X) of 9,844 shows that if short-term debt has increased by one unit (1.00) then profitability (Net Profit Margin) will experience an increase or increase of 9,844. Based on the partial hypothesis test results can be seen that short-term debt has a significant effect on profitability (Net Profit Margin). This is evident from the results of the t test, where short-term debt has  $t_{count} > t_{table}$  which is  $2.902 > 2.0322$  with Sig.  $< \alpha$  is  $0.006 < 0.05$ . Thus it can be concluded that there is a significant effect between short-term debts on profitability (Net Profit Margin) at the Pratama Kosasih Rajabasa Clinic (Kosasih Group) for the period of 2016-2018.

**Keywords:** Short Term Debt, Profitability.

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## I. Introduction

Seeing the development of the health business in Indonesia can make a business opportunity for business people who will try their luck in the health business. Because the health sector business has long-term prospects, this is because the community always needs health services. One of the fastest-growing health services in Lampung is the Kosasih Pratama Clinic (Kosasih Group). The Kosasih Pratama Clinic is one of the health service clinics in Lampung that actively participates in providing health services to the community. The Kosasih Primary Clinic already has 11 branches in Bandar Lampung and 1 branch in Pringsewu Regency.

Every company must have a goal to be achieved. One of the company's goals is to get maximum profit (Hersandy, 2012). In general, a company's success in carrying out its activities is based on the level of profit earned, but the profit earned is not a measure that the company is working efficiently. The level of efficiency can be determined by comparing the profit with the working capital invested by the company. To achieve this goal, working capital is required. Sources of funds to meet working capital can come from internal sources, including retained earnings and external sources, including long-term debt, short-term debt, and share capital.

Under certain conditions, the company can meet its funding needs by prioritizing sources that come from within, but due to the company's growth, it will result in greater need for funds, so that in meeting these fund needs, the company can use sources of funds originating from outside the company, namely debt (Riyanto in Hersandy Mitra, 2012). Stating that debt is an obligation to deliver money, goods, or provide services to other parties in the future as a result of transactions that have occurred in the past or before. In terms of repayment or debt repayment tools, it can be divided into two groups: short-term debt (current debt) and long-term debt.

Harjito and Martono (2010) state that debt contains risks. The higher the risk of the company, the higher the level of profitability that is expected in return for the high risk and vice versa. The lower the risk of the company, the lower the level of profitability that is expected in return for the lower risk. The increase in debt will affect the size of the profit for the company, which reflects the company's ability to fulfill all of its obligations, which is shown by several parts of its own capital that are used to pay all of its obligations, because the greater the use of debt, the greater the obligations.

To meet the needs of purchasing medicines, Klinik Pratama Kosasih (Kosasih Group) uses sources from outside parties (vendors) who are paid using maturity or debt. The following is data on short-term debt (purchases) at the Kosasih Pratama Clinic (Kosasih Group):

**Table 1.** Total Short Term Debt (Drug Purchase) Pratama Kosasih Clinic (Kosasih Group) 2016-2018

Month	Year		
	2016	2017	2018
Januari	46.197.421	51.552.844	45.918.862
Februari	45.070.460	40.820.055	37.209.081
Maret	50.512.636	59.499.864	47.816.484
April	61.968.932	58.494.149	50.075.315
Mei	46.286.100	56.383.442	61.458.232
Juni	62.223.026	50.180.816	64.122.054
Juli	25.323.213	46.675.483	47.661.712
Agustus	37.671.130	49.802.974	37.792.399
September	47.983.061	45.652.663	42.293.767
Oktober	56.707.320	53.754.602	45.562.583
November	50.965.338	47.204.450	43.236.162
Desember	40.524.700	62.530.772	39.321.500
<b>Total</b>	<b>571.433.337</b>	<b>622.552.114</b>	<b>562.468.151</b>

Source: Kosasih Pratama Clinic Documents (Kosasih Group) Data Processed, 2021

From table 1, it can be seen that the fulfillment of drug spending or short-term debt every month at the Kosasih Rajabasa Primary Clinic (Kosasih Group) from 2016-2018 has fluctuated. In 2016, total short-term debt was IDR571,433,337 and in 2017 there was an increase of IDR622,552,114. Then it decreased again in 2018 to IDR 562,468,151. In 2016, the highest amount of drug spending occurred in June amounting to IDR 62,223,026 and the lowest amount of drug spending was in July amounting to IDR 25,323,213. In 2017, the highest amount of drug spending occurred in December amounting to IDR 62,530,772 and the lowest amount of drug spending occurred in February amounting to IDR 40,820,055. In 2018, the largest amount of drug spending occurred in June amounting to IDR 64,122,054 and the lowest amount of spending occurred in February amounting to IDR 37,209,081.

Profitability is the company's ability to generate profits. In general, a company's success in carrying out its activities is often based on the level of profit earned. However, large profits are not necessarily a measure that the company is working efficiently. The new level of efficiency is known by comparing the profit obtained with the wealth or capital that generates this profit (profitability). To find out the development of profitability at the Kosasih Pratama Clinic (Kosasih Group) for the last 3 years, see table 2 below:

**Tabel 2.** Profitability Ratio (*Net Profit Margin*) Klinik Pratama Kosasih (Kosasih Group) 2016-2018

Month	NPM (%)		
	2016	2017	2018
January	17,49	15,96	16,92
February	19,49	17,95	17,78

March	18,47	23,39	18,76
April	17,67	18,20	16,12
May	17,72	16,26	15,67
June	17,73	19,99	20,55
July	16,29	14,12	17,01
August	16,50	17,12	16,12
September	18,43	13,44	16,64
October	18,65	19,13	18,11
November	18,62	15,88	16,76
December	17,87	19,56	15,15
<b>Percent Average</b>	17,91	17,58	17,13

Source: Kosasih Pratama Clinic Documents (Kosasih Group) Data Processed, 2021

The Net Profit Margin Ratio of Klinik Pratama Kosasih Rajabasa (Kosasih Group) from 2016-2018 has decreased. In 2016 the average percentage of the net profit margin ratio was 17.91% and in 2017 there was the highest decline of 17.58%. Then it decreased again in 2018 to 17.13%. In 2016, the highest net profit margin ratio occurred in February at 19.49% and the lowest ratio occurred in July at 16.29%. In 2017, the highest net profit margin ratio was in March at 23.39% and the lowest was in February at 13.44%. In 2018, the highest Net Profit margin ratio was in June at 20.55% and the lowest ratio occurred in December at 15.15%.

Based on the above background, the authors are interested in conducting research as writing material with the title: "The Effect of Short-Term Debt on Profitability at the Kosasih Rajabasa (Kosasih Group) Clinic for the 2016-2018 Period".

## II. Literature Review

### 2.1. Definition of Debt

Apriyanti (2018) stated that debt or liability (referred to in PSAK as a liability) has special characteristics different from other financial statements. According to the FASB (Financial Accounting Standard Board), debt is a sacrifice for future economic benefits that may arise due to an entity's present obligation to deliver assets or provide services to other entities in the future due to past transactions.

Debt or liability is current corporate debt arising from past events; the settlement is expected to result in an outflow of company resources that contain economic benefits (IAI, 2018). Accounts payable are the possible future sacrifices for the economic benefits that arise from the current obligations of a particular entity to transfer assets or provide services to other entities in the future due to past transactions or events. Debt or liabilities are divided into 2 types: short-term debt and long-term debt (Maizah, 2017). Wibowo (2009) explains that short-term debt/current debt is an obligation that

must be paid or repaid through the sacrifice of current assets or incurring other debt within one year or the company's normal operation.

According to Milla et al. (2016), long-term debt is obligations that are paid in a period of more than one year or more of the company's operating cycle. Long-term debt generally arises when a company requires a large number of additional funds. If these funds are to be used for investment in fixed assets that will provide long-term results, such as the construction of buildings or the purchase of machinery, the required funds should be obtained from long-term debt or equity. Meanwhile, according to Warren et al. (2010), long-term debt is an obligation paid with a maturity period of more than one year.

## **2.2. Short Term Debt**

An obligation will be classified as a short-term debt if the repayment will be made using current asset sources or by creating new short-term debt (Nadira & Rustam, 2013). Short-term debt includes trade payables, tax payables, unearned income, part of long-term debt maturing within 12 months, and other debts with maturities of 1 year or 12 months (Syuaib, 2017).

Current debt or short-term debt is a company's financial liability which repayment or payment will be made in the short term (one year from the balance sheet date) using current assets owned by the company. Most of the short-term debt consists of trade in goods/services credit, which is credit needed to be able to run the business (Maulana & Safa, 2017).

According to Bahri (2016), short-term debt indicators consist of 5 types, including. First, Accounts Payable. Liability of the company to creditors arises because of a purchase transaction of goods or services on credit. Accounts payable arise due to purchases made on credit or "on open account," and these trade payables are the main source of unsecured short-term spending. Accounts payable includes purchase transactions on credit but does not require a formal signed note or letter stating the buyer's obligation to the seller. Second, notes payable obligations in the form of a written promise to pay a certain amount of money on a certain date in the future to other parties arising from the purchase of goods or services, loan transactions, or long-term debt that will mature soon. Therefore, it can be said that this debt is more formal than ordinary trade payables. If a note is drawn up with a maturity of less than one year, the note is classified as current payable. The process for arising notes payable is the same as accounts payable, namely from the purchase of goods or services on credit. It can also occur initially as an ordinary trade payable, and then with the aim of providing more certainty for creditors, the trade payables turn into notes payable.

Third, Salaries Payable. Obligations arise because there are already working employees but have not received a salary paid by the company. Four, Tax Payable. Liabilities arise

because it is time for the company to pay income tax but for other reasons to not be paid. Fifth, Unearned Income. Revenues received in advance are obligations arising from receiving cash from customers in the current period but have not been given services.

In this study, the debt indicator used is accounts payable arising from purchases made on credit or "on open account," and this account payable is the main source of unsecured drug purchases. Accounts payable includes purchase transactions on credit but does not require a signed formal note or letter stating the buyer's obligation to the seller.

### **2.3. Profitability**

Profitability ratio is the ratio used to determine the company's ability to generate profits or how effective the management of the company is by management. To be able to continue his life, the company must be in a favorable situation. If the company is in an unfavorable condition, it will be difficult for the company to obtain loans from creditors and outside investment (Maulana & Safa, 2017).

Kasmir (2008) states that profitability is a ratio to assess a company's ability to seek profit. This ratio provides a measure of the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income. Profitability ratios can be done by using comparisons between the various components in the financial statements, especially the balance sheet financial statements, and the income statement. Measurements can be made for several operating periods. The goal is to see the company's development within a certain time frame, either decrease or increase, and find the causes of these changes.

A profitability ratio is a ratio to show the success of the company in generating profits. Potential investors will carefully analyze the smooth running of a company and its ability to earn a profit. The better the profitability ratio, the better it describes the company's high profitability. Profitability ratios include: gross profit margin, net profit margin, return on assets (ROA), and return on equity (ROE) (Fahmi, 2016).

### **2.4. Relationship of Short-Term Debt to Profitability**

Debt is capital originating from outside the company, which is temporary in nature and for the company concerned must be paid back at the due time (Riyanto, 2010). Therefore the company will try to find outside funds by going into debt. This is by Hilmi's research (2010) which states that an increase in debt will affect the size of the profit for the company, which reflects the company's ability to fulfill all its obligations, which is shown by some parts of its own capital that are used to pay all its obligations, because the greater the use of debt, the greater the use of debt. The greater the obligation.

Debt has risks. The higher the risk of a company, the higher the level of profitability expected in return for the high risk, and conversely, the lower the risk of the company, the lower the level of profitability expected in return for the lower risk (Rilla, 2017).

Kasmir (2010) states that an increase in debt will affect the size of the profit for the company, which reflects the company's ability to fulfill all of its obligations, which is shown by several parts of its own capital that are used to pay all of its obligations, because the greater the use of debt, the greater its liabilities. So in essence, if the loan or debt changes, then a company's profitability will also change. But change there are two sides. First, if the debt increases, it will also increase profitability, and conversely, a decrease in debt also reduces profitability. And second, if the increase in debt will decrease profitability and decrease debt will increase profitability.

### **III. Methodology**

#### **3.1. Data and Source Data**

This study uses quantitative research, which is an associative method with a form of a causal relationship. The associative method is a study that aims to determine the effect or relationship between two or more variables, namely short-term debt as the independent variable and profitability as the dependent variable. A causal relationship is a relationship that is causal in nature. As one variable (independent) affects other variables (dependent) (Sugiyono, 2012),. This research is a type of causal associative research. Because this research is one of the variables affecting other variables, this type of associative research has the highest level compared to descriptive and comparative. This research can build a theory that can explain, predict, and control a symptom.

The type of data used in this study is secondary data. Panbundu (2006) states that secondary data is data published or used by organizations that are not processed. Secondary data is data obtained in a ready-made form, and this data is taken from secondary sources (third parties). And secondary data used is the Financial Statements of the Kosasih Rajabasa Clinic (Kosasih Group) 2016 - 2018.

This study uses secondary data. From the previous understanding, it can be concluded that secondary data is data that already exists and has been previously collected for non-urgent purposes. The advantage of secondary data is that data is readily available, economical, and fast to obtain. At the same time, the weakness of secondary data is that it cannot answer the overall problem under study. The data source obtained in this study is the historical data source of the 2016-2018 Rajabasa Kosasih Clinic Financial Statements, which have been used for annual tax reporting.

### **3.2. Population and Sample**

According to Sugiyono (2012), the population is a generalization area consisting of objects/subjects with certain qualities and characteristics determined by research to be studied and then conclude. The population in this study were the Financial Statements of the Kosasih Rajabasa Clinic (Kosasih Group) 2016-2018. The sample is part of the number and characteristics of the population. If the population is large, and it is impossible for the researcher to study everything in the population, for example, because of limited funds, energy and time, the researcher can use a sample taken from that population. The samples in this study are reports of short-term debt (drug purchases), sales, and net income in 2016-2018 at the Pratama Kosasih Rajabasa Clinic (Kosasih Group).

### **3.3. Data Collection Technique**

In this study, researchers used data collection techniques in the following ways. Firth, documentation is a data collection technique by searching for data on matters relating to the material to be studied. In this study, documentation is used to obtain data at the Kosasih Pratama Clinic (Kosasih Group) in Bandar Lampung, one of which is the company's organizational structure. Second, the method of observation is the observation and recording of the phenomena being investigated. This method the authors use to find data or information regarding the general description of the object of research. Third, this method is usually defined as a technique in which the researcher collects data by means of direct communication with the subject. In this method the writer uses the free guided type, namely: in conducting interviews the writer does it freely but is limited by the structure of the questions that have been prepared.

### **3.4. Data Analysis Technique**

Data analysis technique is a technique used to process research results in order to obtain a conclusion. By looking at the theoretical framework, the data analysis technique used in this research is quantitative analysis. Sugiyono (2012) states that quantitative data analysis techniques are as follows: "In quantitative research, data analysis uses statistics. The statistics used can be in the form of descriptive and inferential/inductive statistics. Inferential statistics can be in the form of parametric statistics and nonparametric statistics. Researchers use inferential statistics when the research is conducted on a random sample. The data from the analysis results are then presented and discussed. Data presentation can be in the form of tables, frequency distribution tables, line charts, bar graphs, pie chart (pie charts), and pictograms. The discussion of the research results is an in-depth explanation and interpretation of the data that has been presented."

The quantitative data analysis steps described consist of: Classical Assumption test and Simple Linear Regression Test. Simple Linear Regression Test is used to predict or test the effect of 1 independent variable or independent variable on the related variable or dependent variable. Simple linear regression analysis is a linear relationship between one independent variable (X) and the dependent variable (Y). This analysis is to determine the direction of the relationship between the independent variable and the dependent variable whether positive or negative and to predict the value of the dependent variable if the value of the independent variable has increased or decreased.

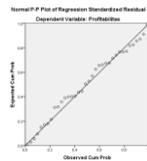
Next is the Partial Statistical T-test. The t-test is one of the research hypothesis tests in simple linear regression analysis and multiple linear regression analysis. The  $t_{test}$  aims to determine whether the independent or independent variable (X) partially (individually) affects the dependent or dependent variable (Y). The basis for decision making in this test can be determined based on a significant value (sig), that is, if the significant value (sig)  $< 0.05$  then there is an influence between the independent or independent variable (X) on the dependent or dependent variable (Y), and the second one compares between the value of t count with t table. If the value of t count  $> t_{table}$ , then there is an effect of the independent or independent variable (X) on the dependent or dependent variable (Y).

And the last one is the coefficient of determination (R<sup>2</sup>). The coefficient of determination (R Square) or usually symbolized by R<sup>2</sup> is interpreted as the contribution of the influence given by the independent variable (X) to the dependent variable (Y). The coefficient of determination (R Square) can be used to predict how much influence the independent variable (X) contributes to the dependent variable (Y). The amount of the coefficient of determination (R Square) is the same as the square of the correlation coefficient or R. From the value of the coefficient of determination (R Square) it can be seen what percentage of the influence of variable X is on variable Y.

## IV. Results and Discussion

### 3.1. Classic assumption test

The classical assumption test is used to test whether the regression model really shows a significant and representative relationship. The test results can be seen in the following graphs and tables:



**Figure 1.** Data Normality Test Results  
 Source: Data processed, 2019

From Figure 1 it can be seen that the data is spread around the diagonal line and follows the direction of a straight line (not spread far from the straight line), so it can be said that the regression model used has met the normality assumption and is suitable for profitability prediction based on the input of short-term debt variables.

**Table 3.** Kolmogorov-Smirnov Test Results  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		36
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.70515714
Most Extreme Differences	Absolute	.087
	Positive	.069
	Negative	-.087
Test Statistic		.087
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Source: Data processed, 2019

In table 3 the significance of the Kolmogorov-Smirnov test is 0.200. The criterion used is that H0 is accepted if the significance value >  $\alpha$  has been determined. Because the significance value (sig) = 0.200 > 0.05, H0 is accepted. This means that profitability comes from a population that is normally distributed.

### 3.2. Heteroscedasticity Test

To test whether in a regression model there is an unequal variance of the residuals, from observations. If the variance of the residuals remains, there is no heteroskdacity. The type of heteroscedasticity test used in this study is the Glejser test and the scatterplot graph. The working principle of the Glejser test is to regress the independent variable to the absolute residual value or Abs\_Res. On the basis of decision making, if the significance value is  $> 0.05$ , the conclusion is that there is no heteroscedasticity symptom in the regression model, and vice versa. Meanwhile, to detect the presence or absence of heteroscedasticity symptoms with a scatterplot chart is to look at the presence or absence of certain patterns on the graph. If the dots are spread out, there will be no signs of heteroscedasticity. The test results can be seen in the following table:

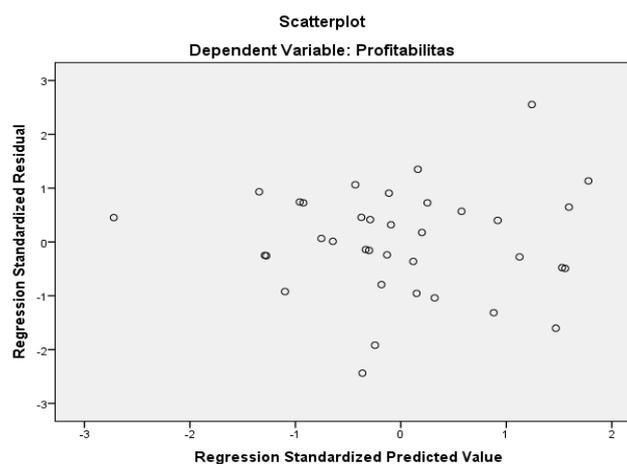
**Table 4.** Glejser Heteroscedasticity Test Results

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-.114	1.021		-.111	.912
	Hutang Jangka Pendek	2.922E-8	.000	.236	1.417	.166

a. Dependent Variable: ABS\_RES

Source: Data processed, 2019

In table 4, the significance of the Glejser test is 0.166. On the basis of decision-making, there is no symptom of heteroscedasticity if the significance value  $> \alpha$  has been determined. Because the significance value (sig) = 0.166  $> 0.05$ , the regression model in this study did not occur heteroscedasticity.



**Figure 2.** The results of the scatterplot heteroscedasticity test

Source: Data processed, 2019

From Figure 2 on the scatterplot chart above, it shows that the dots spread above and below the number 0, the distribution of data points does not show a certain pattern. Thus it can be concluded that the regression model does not occur heteroscedasticity.

### 3.3. Autocorrelation Test

Autocorrelation is a correlation or relationship that occurs between members of a series of observations arranged in a time series at different times. One of the most popular tests for detecting autocorrelation is the Durbin Watson test.

**Table 5.** Durbin Watson Autocorrelation Test Results

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.446 <sup>a</sup>	.199	.175	1.73005	2.316

a. Predictors: (Constant), Hutang Jangka Pendek

b. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Table 5 shows that the value of d (Durbin Watson) is 2,316. Furthermore, this value will be compared with the Durbin Watson table value at a significance of 5% or 0.05 using the formula (k; N). The number of independent variables is one (k = 1), while the number of samples is 36 (N = 36), then (k; N) = (1; 36). Based on the Durbin Watson table, it can be found that the value of dL = 1.411 and dU = 1.525. The d value (Durbin Watson) of 2,316 is greater than the upper limit (dU) of 1.525 and less than (4-dU) of 4-1,525 = 2,475. So as the basis for decision making in the Durbin Watson test, it can be concluded that there are no autocorrelation problems or symptoms.

### 3.4. Simple Linear Regression Test

Model testing through simple linear regression is carried out to analyze the effect of short-term debt on profitability (Net Profit Margin).

**Table 6.** Simple Linear Regression Test Results

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	12.725	1.680		7.575	.000
	Hutang Jangka Pendek	9.844E-8	.000	.446	2.902	.006

a. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Table 6 shows that the simple linear regression equation from the results of the analysis, namely:

$$Y = 12,725 + 9,844X + e$$

The regression equation above can be interpreted as follows:

a. Constant

A constant of 12.725 shows that if short-term debt (X) is zero, it means that if there is no short-term debt, the profitability will be 12.725. In other words, if there are no other supporting variables, then the profitability will still have a value of 12.725.

b. Regression Coefficient (X)

The coefficient of the independent variable (X) in the table shows the number 9.844. This means that if short-term debt increases by 1 point, then profitability will increase by 9.844.

### 3.5. Hypothesis testing

Hypothesis testing is intended to test or check whether the regression coefficient obtained is significant.

**Table 7.** Result of Partial Hypothesis Testing (t test)

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	12.725	1.680		7.575	.000
	Hutang Jangka Pendek	9.844E-8	.000	.446	2.902	.006

a. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Based on the table above, it can be seen that the significance value for short-term debt is 0.006 with a significance level of 0.05. Because the Sig. <α, it can be concluded that H0 is rejected. When viewed from the results of the calculation of t table it can be seen that t count > t table is 2.902 > 2.0322 then H0 is rejected. In this case, it can be concluded that there is a significant influence between short-term debt on profitability. Thus an increase in short-term debt guarantees an increase in profitability.

### 3.6. R2 test (coefficient of determination)

The value of R<sup>2</sup> has an interval ranging from 0 to 1 (0 ≤ R<sup>2</sup> ≤ 1). The greater R<sup>2</sup> (close to 1), the better the regression model. The closer to 0, the independent variable (X) as a whole cannot explain the variability of the dependent variable (Y).

**Table 8.** Determinant Test Results R<sup>2</sup>

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446 <sup>a</sup>	.199	.175	1.73005

a. Predictors: (Constant), Hutang Jangka Pendek

b. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Based on table 8 above, the R<sup>2</sup> adjusted value is 0.199. This coefficient shows that 19.9% of the profitability variable can be explained by short-term debt. While the remaining 80.1% is influenced by other variables that are not explained in this research model.

### 3.7. Problem Analysis and Solution

This is in line with the theory of Harjito and Martono (2010) which states that debt contains risks. The higher the risk of the company, the higher the level of profitability that is expected in return for the high risk and vice versa. The lower the risk of the company, the lower the level of profitability that is expected in return for the lower risk.

## V. Conclusion

Based on the data that has been collected, it can be seen that the use of short-term debt at the Kosasih Rajabasa Clinic (Kosasih Group) for the 2016-2019 period has fluctuated. Based on the data collected, it can also be seen that the company's profitability has continued to decline from 2016-2018, which means that the company's ability to generate profits is still low. from the results of the t-test, where short-term debt has  $t_{count} > t_{table}$ , namely  $2.902 > 2.0322$  with a value of Sig.  $< \alpha$ , namely  $0.006 < 0.05$ . Thus it can be concluded that there is a significant influence between short-term debt on profitability (Net Profit Margin) at the Pratama Kosasih Rajabasa Clinic (Kosasih Group) for the 2016-2018 period. The value of R<sup>2</sup> Adjusted is 0.199, which means that 19.9% of the profitability variable can be explained by short-term debt. While the remaining 80.1% is influenced by other variables that are not explained in this research model.

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## The Effect of Short Term Debt To Profitability In The Pratama Clinic of Kosasih Rajabasa (Kosasih Group) Period 2016-2018

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### Abstract

This study aims to determine whether debt, both simultaneously and partially, affects the profitability of the Pratama Rajabasa Primary Clinic (Kosasih Group) for the 2016-2018 periods. After conducting a regression analysis using SPSS version 23.0 it can be seen that the constant value of 12.725, which means if short-term debt (X) equals zero or fixed, then profitability (Net Profit Margin) also remains at 12.725. The coefficient of short-term debt (X) of 9,844 shows that if short-term debt has increased by one unit (1.00) then profitability (Net Profit Margin) will experience an increase or increase of 9,844. Based on the partial hypothesis test results can be seen that short-term debt has a significant effect on profitability (Net Profit Margin). This is evident from the results of the t test, where short-term debt has  $t_{count} > t_{table}$  which is  $2.902 > 2.0322$  with Sig.  $< \alpha$  is  $0.006 < 0.05$ . Thus it can be concluded that there is a significant effect between short-term debts on profitability (Net Profit Margin) at the Pratama Kosasih Rajabasa Clinic (Kosasih Group) for the period of 2016-2018.

**Keywords:** Short Term Debt, Profitability.

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## I. Introduction

Seeing the development of the health business in Indonesia can make a business opportunity for business people who will try their luck in the health business. Because the health sector business has long-term prospects, this is because the community always needs health services. One of the fastest-growing health services in Lampung is the Kosasih Pratama Clinic (Kosasih Group). The Kosasih Pratama Clinic is one of the health service clinics in Lampung that actively participates in providing health services to the community. The Kosasih Primary Clinic already has 11 branches in Bandar Lampung and 1 branch in Pringsewu Regency.

Every company must have a goal to be achieved. One of the company's goals is to get maximum profit (Hersandy, 2012). In general, a company's success in carrying out its activities is based on the level of profit earned, but the profit earned is not a measure that the company is working efficiently. The level of efficiency can be determined by comparing the profit with the working capital invested by the company. To achieve this goal, working capital is required. Sources of funds to meet working capital can come from internal sources, including retained earnings and external sources, including long-term debt, short-term debt, and share capital.

Under certain conditions, the company can meet its funding needs by prioritizing sources that come from within, but due to the company's growth, it will result in greater need for funds, so that in meeting these fund needs, the company can use sources of funds originating from outside the company, namely debt (Riyanto in Hersandy Mitra, 2012). Stating that debt is an obligation to deliver money, goods, or provide services to other parties in the future as a result of transactions that have occurred in the past or before. In terms of repayment or debt repayment tools, it can be divided into two groups: short-term debt (current debt) and long-term debt.

Harjito and Martono (2010) state that debt contains risks. The higher the risk of the company, the higher the level of profitability that is expected in return for the high risk and vice versa. The lower the risk of the company, the lower the level of profitability that is expected in return for the lower risk. The increase in debt will affect the size of the profit for the company, which reflects the company's ability to fulfill all of its obligations, which is shown by several parts of its own capital that are used to pay all of its obligations, because the greater the use of debt, the greater the obligations.

To meet the needs of purchasing medicines, Klinik Pratama Kosasih (Kosasih Group) uses sources from outside parties (vendors) who are paid using maturity or debt. The following is data on short-term debt (purchases) at the Kosasih Pratama Clinic (Kosasih Group):

**Table 1.** Total Short Term Debt (Drug Purchase) Pratama Kosasih Clinic (Kosasih Group) 2016-2018

Month	Year		
	2016	2017	2018
Januari	46.197.421	51.552.844	45.918.862
Februari	45.070.460	40.820.055	37.209.081
Maret	50.512.636	59.499.864	47.816.484
April	61.968.932	58.494.149	50.075.315
Mei	46.286.100	56.383.442	61.458.232
Juni	62.223.026	50.180.816	64.122.054
Juli	25.323.213	46.675.483	47.661.712
Agustus	37.671.130	49.802.974	37.792.399
September	47.983.061	45.652.663	42.293.767
Oktober	56.707.320	53.754.602	45.562.583
November	50.965.338	47.204.450	43.236.162
Desember	40.524.700	62.530.772	39.321.500
<b>Total</b>	<b>571.433.337</b>	<b>622.552.114</b>	<b>562.468.151</b>

Source: Kosasih Pratama Clinic Documents (Kosasih Group) Data Processed, 2021

From table 1, it can be seen that the fulfillment of drug spending or short-term debt every month at the Kosasih Rajabasa Primary Clinic (Kosasih Group) from 2016-2018 has fluctuated. In 2016, total short-term debt was IDR571,433,337 and in 2017 there was an increase of IDR622,552,114. Then it decreased again in 2018 to IDR 562,468,151. In 2016, the highest amount of drug spending occurred in June amounting to IDR 62,223,026 and the lowest amount of drug spending was in July amounting to IDR 25,323,213. In 2017, the highest amount of drug spending occurred in December amounting to IDR 62,530,772 and the lowest amount of drug spending occurred in February amounting to IDR 40,820,055. In 2018, the largest amount of drug spending occurred in June amounting to IDR 64,122,054 and the lowest amount of spending occurred in February amounting to IDR 37,209,081.

Profitability is the company's ability to generate profits. In general, a company's success in carrying out its activities is often based on the level of profit earned. However, large profits are not necessarily a measure that the company is working efficiently. The new level of efficiency is known by comparing the profit obtained with the wealth or capital that generates this profit (profitability). To find out the development of profitability at the Kosasih Pratama Clinic (Kosasih Group) for the last 3 years, see table 2 below:

**Tabel 2.** Profitability Ratio (*Net Profit Margin*) Klinik Pratama Kosasih (Kosasih Group) 2016-2018

Month	NPM (%)		
	2016	2017	2018
January	17,49	15,96	16,92
February	19,49	17,95	17,78

March	18,47	23,39	18,76
April	17,67	18,20	16,12
May	17,72	16,26	15,67
June	17,73	19,99	20,55
July	16,29	14,12	17,01
August	16,50	17,12	16,12
September	18,43	13,44	16,64
October	18,65	19,13	18,11
November	18,62	15,88	16,76
December	17,87	19,56	15,15
<b>Percent Average</b>	17,91	17,58	17,13

Source: Kosasih Pratama Clinic Documents (Kosasih Group) Data Processed, 2021

The Net Profit Margin Ratio of Klinik Pratama Kosasih Rajabasa (Kosasih Group) from 2016-2018 has decreased. In 2016 the average percentage of the net profit margin ratio was 17.91% and in 2017 there was the highest decline of 17.58%. Then it decreased again in 2018 to 17.13%. In 2016, the highest net profit margin ratio occurred in February at 19.49% and the lowest ratio occurred in July at 16.29%. In 2017, the highest net profit margin ratio was in March at 23.39% and the lowest was in February at 13.44%. In 2018, the highest Net Profit margin ratio was in June at 20.55% and the lowest ratio occurred in December at 15.15%.

Based on the above background, the authors are interested in conducting research as writing material with the title: "The Effect of Short-Term Debt on Profitability at the Kosasih Rajabasa (Kosasih Group) Clinic for the 2016-2018 Period".

## II. Literature Review

### 2.1. Definition of Debt

Apriyanti (2018) stated that debt or liability (referred to in PSAK as a liability) has special characteristics different from other financial statements. According to the FASB (Financial Accounting Standard Board), debt is a sacrifice for future economic benefits that may arise due to an entity's present obligation to deliver assets or provide services to other entities in the future due to past transactions.

Debt or liability is current corporate debt arising from past events; the settlement is expected to result in an outflow of company resources that contain economic benefits (IAI, 2018). Accounts payable are the possible future sacrifices for the economic benefits that arise from the current obligations of a particular entity to transfer assets or provide services to other entities in the future due to past transactions or events. Debt or liabilities are divided into 2 types: short-term debt and long-term debt (Maizah, 2017). Wibowo (2009) explains that short-term debt/current debt is an obligation that

must be paid or repaid through the sacrifice of current assets or incurring other debt within one year or the company's normal operation.

According to Milla et al. (2016), long-term debt is obligations that are paid in a period of more than one year or more of the company's operating cycle. Long-term debt generally arises when a company requires a large number of additional funds. If these funds are to be used for investment in fixed assets that will provide long-term results, such as the construction of buildings or the purchase of machinery, the required funds should be obtained from long-term debt or equity. Meanwhile, according to Warren et al. (2010), long-term debt is an obligation paid with a maturity period of more than one year.

## **2.2. Short Term Debt**

An obligation will be classified as a short-term debt if the repayment will be made using current asset sources or by creating new short-term debt (Nadira & Rustam, 2013). Short-term debt includes trade payables, tax payables, unearned income, part of long-term debt maturing within 12 months, and other debts with maturities of 1 year or 12 months (Syuaib, 2017).

Current debt or short-term debt is a company's financial liability which repayment or payment will be made in the short term (one year from the balance sheet date) using current assets owned by the company. Most of the short-term debt consists of trade in goods/services credit, which is credit needed to be able to run the business (Maulana & Safa, 2017).

According to Bahri (2016), short-term debt indicators consist of 5 types, including. First, Accounts Payable. Liability of the company to creditors arises because of a purchase transaction of goods or services on credit. Accounts payable arise due to purchases made on credit or "on open account," and these trade payables are the main source of unsecured short-term spending. Accounts payable includes purchase transactions on credit but does not require a formal signed note or letter stating the buyer's obligation to the seller. Second, notes payable obligations in the form of a written promise to pay a certain amount of money on a certain date in the future to other parties arising from the purchase of goods or services, loan transactions, or long-term debt that will mature soon. Therefore, it can be said that this debt is more formal than ordinary trade payables. If a note is drawn up with a maturity of less than one year, the note is classified as current payable. The process for arising notes payable is the same as accounts payable, namely from the purchase of goods or services on credit. It can also occur initially as an ordinary trade payable, and then with the aim of providing more certainty for creditors, the trade payables turn into notes payable.

Third, Salaries Payable. Obligations arise because there are already working employees but have not received a salary paid by the company. Four, Tax Payable. Liabilities arise

because it is time for the company to pay income tax but for other reasons to not be paid. Fifth, Unearned Income. Revenues received in advance are obligations arising from receiving cash from customers in the current period but have not been given services.

In this study, the debt indicator used is accounts payable arising from purchases made on credit or "on open account," and this account payable is the main source of unsecured drug purchases. Accounts payable includes purchase transactions on credit but does not require a signed formal note or letter stating the buyer's obligation to the seller.

### **2.3. Profitability**

Profitability ratio is the ratio used to determine the company's ability to generate profits or how effective the management of the company is by management. To be able to continue his life, the company must be in a favorable situation. If the company is in an unfavorable condition, it will be difficult for the company to obtain loans from creditors and outside investment (Maulana & Safa, 2017).

Kasmir (2008) states that profitability is a ratio to assess a company's ability to seek profit. This ratio provides a measure of the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income. Profitability ratios can be done by using comparisons between the various components in the financial statements, especially the balance sheet financial statements, and the income statement. Measurements can be made for several operating periods. The goal is to see the company's development within a certain time frame, either decrease or increase, and find the causes of these changes.

A profitability ratio is a ratio to show the success of the company in generating profits. Potential investors will carefully analyze the smooth running of a company and its ability to earn a profit. The better the profitability ratio, the better it describes the company's high profitability. Profitability ratios include: gross profit margin, net profit margin, return on assets (ROA), and return on equity (ROE) (Fahmi, 2016).

### **2.4. Relationship of Short-Term Debt to Profitability**

Debt is capital originating from outside the company, which is temporary in nature and for the company concerned must be paid back at the due time (Riyanto, 2010). Therefore the company will try to find outside funds by going into debt. This is by Hilmi's research (2010) which states that an increase in debt will affect the size of the profit for the company, which reflects the company's ability to fulfill all its obligations, which is shown by some parts of its own capital that are used to pay all its obligations, because the greater the use of debt, the greater the use of debt. The greater the obligation.

Debt has risks. The higher the risk of a company, the higher the level of profitability expected in return for the high risk, and conversely, the lower the risk of the company, the lower the level of profitability expected in return for the lower risk (Rilla, 2017).

Kasmir (2010) states that an increase in debt will affect the size of the profit for the company, which reflects the company's ability to fulfill all of its obligations, which is shown by several parts of its own capital that are used to pay all of its obligations, because the greater the use of debt, the greater its liabilities. So in essence, if the loan or debt changes, then a company's profitability will also change. But change there are two sides. First, if the debt increases, it will also increase profitability, and conversely, a decrease in debt also reduces profitability. And second, if the increase in debt will decrease profitability and decrease debt will increase profitability.

### **III. Methodology**

#### **3.1. Data and Source Data**

This study uses quantitative research, which is an associative method with a form of a causal relationship. The associative method is a study that aims to determine the effect or relationship between two or more variables, namely short-term debt as the independent variable and profitability as the dependent variable. A causal relationship is a relationship that is causal in nature. As one variable (independent) affects other variables (dependent) (Sugiyono, 2012),. This research is a type of causal associative research. Because this research is one of the variables affecting other variables, this type of associative research has the highest level compared to descriptive and comparative. This research can build a theory that can explain, predict, and control a symptom.

The type of data used in this study is secondary data. Panbundu (2006) states that secondary data is data published or used by organizations that are not processed. Secondary data is data obtained in a ready-made form, and this data is taken from secondary sources (third parties). And secondary data used is the Financial Statements of the Kosasih Rajabasa Clinic (Kosasih Group) 2016 - 2018.

This study uses secondary data. From the previous understanding, it can be concluded that secondary data is data that already exists and has been previously collected for non-urgent purposes. The advantage of secondary data is that data is readily available, economical, and fast to obtain. At the same time, the weakness of secondary data is that it cannot answer the overall problem under study. The data source obtained in this study is the historical data source of the 2016-2018 Rajabasa Kosasih Clinic Financial Statements, which have been used for annual tax reporting.

### **3.2. Population and Sample**

According to Sugiyono (2012), the population is a generalization area consisting of objects/subjects with certain qualities and characteristics determined by research to be studied and then conclude. The population in this study were the Financial Statements of the Kosasih Rajabasa Clinic (Kosasih Group) 2016-2018. The sample is part of the number and characteristics of the population. If the population is large, and it is impossible for the researcher to study everything in the population, for example, because of limited funds, energy and time, the researcher can use a sample taken from that population. The samples in this study are reports of short-term debt (drug purchases), sales, and net income in 2016-2018 at the Pratama Kosasih Rajabasa Clinic (Kosasih Group).

### **3.3. Data Collection Technique**

In this study, researchers used data collection techniques in the following ways. Firth, documentation is a data collection technique by searching for data on matters relating to the material to be studied. In this study, documentation is used to obtain data at the Kosasih Pratama Clinic (Kosasih Group) in Bandar Lampung, one of which is the company's organizational structure. Second, the method of observation is the observation and recording of the phenomena being investigated. This method the authors use to find data or information regarding the general description of the object of research. Third, this method is usually defined as a technique in which the researcher collects data by means of direct communication with the subject. In this method the writer uses the free guided type, namely: in conducting interviews the writer does it freely but is limited by the structure of the questions that have been prepared.

### **3.4. Data Analysis Technique**

Data analysis technique is a technique used to process research results in order to obtain a conclusion. By looking at the theoretical framework, the data analysis technique used in this research is quantitative analysis. Sugiyono (2012) states that quantitative data analysis techniques are as follows: "In quantitative research, data analysis uses statistics. The statistics used can be in the form of descriptive and inferential/inductive statistics. Inferential statistics can be in the form of parametric statistics and nonparametric statistics. Researchers use inferential statistics when the research is conducted on a random sample. The data from the analysis results are then presented and discussed. Data presentation can be in the form of tables, frequency distribution tables, line charts, bar graphs, pie chart (pie charts), and pictograms. The discussion of the research results is an in-depth explanation and interpretation of the data that has been presented."

The quantitative data analysis steps described consist of: Classical Assumption test and Simple Linear Regression Test. Simple Linear Regression Test is used to predict or test the effect of 1 independent variable or independent variable on the related variable or dependent variable. Simple linear regression analysis is a linear relationship between one independent variable (X) and the dependent variable (Y). This analysis is to determine the direction of the relationship between the independent variable and the dependent variable whether positive or negative and to predict the value of the dependent variable if the value of the independent variable has increased or decreased.

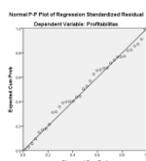
Next is the Partial Statistical T-test. The t-test is one of the research hypothesis tests in simple linear regression analysis and multiple linear regression analysis. The  $t_{test}$  aims to determine whether the independent or independent variable (X) partially (individually) affects the dependent or dependent variable (Y). The basis for decision making in this test can be determined based on a significant value (sig), that is, if the significant value (sig)  $< 0.05$  then there is an influence between the independent or independent variable (X) on the dependent or dependent variable (Y), and the second one compares between the value of t count with t table. If the value of t count  $> t_{table}$ , then there is an effect of the independent or independent variable (X) on the dependent or dependent variable (Y).

And the last one is the coefficient of determination (R<sup>2</sup>). The coefficient of determination (R Square) or usually symbolized by R<sup>2</sup> is interpreted as the contribution of the influence given by the independent variable (X) to the dependent variable (Y). The coefficient of determination (R Square) can be used to predict how much influence the independent variable (X) contributes to the dependent variable (Y). The amount of the coefficient of determination (R Square) is the same as the square of the correlation coefficient or R. From the value of the coefficient of determination (R Square) it can be seen what percentage of the influence of variable X is on variable Y.

## IV. Results and Discussion

### 3.1. Classic assumption test

The classical assumption test is used to test whether the regression model really shows a significant and representative relationship. The test results can be seen in the following graphs and tables:



**Figure 1.** Data Normality Test Results

Source: Data processed, 2019

From Figure 1 it can be seen that the data is spread around the diagonal line and follows the direction of a straight line (not spread far from the straight line), so it can be said that the regression model used has met the normality assumption and is suitable for profitability prediction based on the input of short-term debt variables.

**Table 3.** Kolmogorov-Smirnov Test Results  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		36
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.70515714
	Most Extreme Differences	
	Absolute	.087
	Positive	.069
	Negative	-.087
Test Statistic		.087
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: Data processed, 2019

In table 3 the significance of the Kolmogorov-Smirnov test is 0.200. The criterion used is that H0 is accepted if the significance value >  $\alpha$  has been determined. Because the significance value (sig) = 0.200 > 0.05, H0 is accepted. This means that profitability comes from a population that is normally distributed.

### 3.2. Heteroscedasticity Test

To test whether in a regression model there is an unequal variance of the residuals, from observations. If the variance of the residuals remains, there is no heteroskdacity. The type of heteroscedasticity test used in this study is the Glejser test and the scatterplot graph. The working principle of the Glejser test is to regress the independent variable to the absolute residual value or Abs\_Res. On the basis of decision making, if the significance value is  $> 0.05$ , the conclusion is that there is no heteroscedasticity symptom in the regression model, and vice versa. Meanwhile, to detect the presence or absence of heteroscedasticity symptoms with a scatterplot chart is to look at the presence or absence of certain patterns on the graph. If the dots are spread out, there will be no signs of heteroscedasticity. The test results can be seen in the following table:

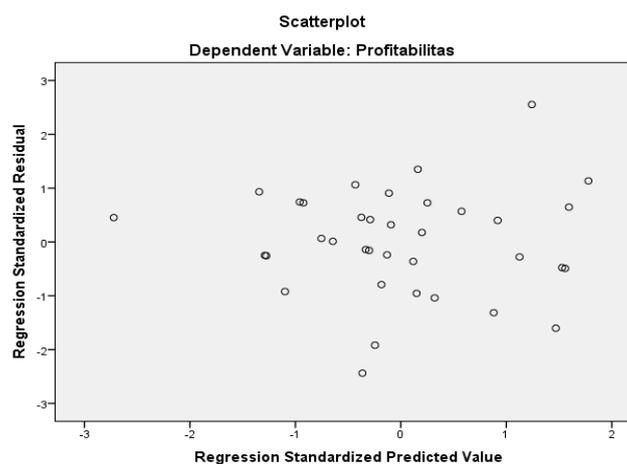
**Table 4.** Glejser Heteroscedasticity Test Results

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-.114	1.021		-.111	.912
	Hutang Jangka Pendek	2.922E-8	.000	.236	1.417	.166

a. Dependent Variable: ABS\_RES

Source: Data processed, 2019

In table 4, the significance of the Glejser test is 0.166. On the basis of decision-making, there is no symptom of heteroscedasticity if the significance value  $> \alpha$  has been determined. Because the significance value (sig) = 0.166  $> 0.05$ , the regression model in this study did not occur heteroscedasticity.



**Figure 2.** The results of the scatterplot heteroscedasticity test

Source: Data processed, 2019

From Figure 2 on the scatterplot chart above, it shows that the dots spread above and below the number 0, the distribution of data points does not show a certain pattern. Thus it can be concluded that the regression model does not occur heteroscedasticity.

### 3.3. Autocorrelation Test

Autocorrelation is a correlation or relationship that occurs between members of a series of observations arranged in a time series at different times. One of the most popular tests for detecting autocorrelation is the Durbin Watson test.

**Table 5.** Durbin Watson Autocorrelation Test Results

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.446 <sup>a</sup>	.199	.175	1.73005	2.316

a. Predictors: (Constant), Hutang Jangka Pendek

b. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Table 5 shows that the value of d (Durbin Watson) is 2,316. Furthermore, this value will be compared with the Durbin Watson table value at a significance of 5% or 0.05 using the formula (k; N). The number of independent variables is one (k = 1), while the number of samples is 36 (N = 36), then (k; N) = (1; 36). Based on the Durbin Watson table, it can be found that the value of dL = 1.411 and dU = 1.525. The d value (Durbin Watson) of 2,316 is greater than the upper limit (dU) of 1.525 and less than (4-dU) of 4-1,525 = 2,475. So as the basis for decision making in the Durbin Watson test, it can be concluded that there are no autocorrelation problems or symptoms.

### 3.4. Simple Linear Regression Test

Model testing through simple linear regression is carried out to analyze the effect of short-term debt on profitability (Net Profit Margin).

**Table 6.** Simple Linear Regression Test Results

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	12.725	1.680		7.575	.000
	Hutang Jangka Pendek	9.844E-8	.000	.446	2.902	.006

a. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Table 6 shows that the simple linear regression equation from the results of the analysis, namely:

$$Y = 12,725 + 9,844X + e$$

The regression equation above can be interpreted as follows:

a. Constant

A constant of 12.725 shows that if short-term debt (X) is zero, it means that if there is no short-term debt, the profitability will be 12.725. In other words, if there are no other supporting variables, then the profitability will still have a value of 12.725.

b. Regression Coefficient (X)

The coefficient of the independent variable (X) in the table shows the number 9.844. This means that if short-term debt increases by 1 point, then profitability will increase by 9.844.

### 3.5. Hypothesis testing

Hypothesis testing is intended to test or check whether the regression coefficient obtained is significant.

**Table 7.** Result of Partial Hypothesis Testing (t test)

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	
Model					Sig.	
1	(Constant)	12.725	1.680		7.575	.000
	Hutang Jangka Pendek	9.844E-8	.000	.446	2.902	.006

a. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Based on the table above, it can be seen that the significance value for short-term debt is 0.006 with a significance level of 0.05. Because the Sig. <α, it can be concluded that H0 is rejected. When viewed from the results of the calculation of t table it can be seen that t count > t table is 2.902 > 2.0322 then H0 is rejected. In this case, it can be concluded that there is a significant influence between short-term debt on profitability. Thus an increase in short-term debt guarantees an increase in profitability.

### 3.6. R2 test (coefficient of determination)

The value of R<sup>2</sup> has an interval ranging from 0 to 1 (0 ≤ R<sup>2</sup> ≤ 1). The greater R<sup>2</sup> (close to 1), the better the regression model. The closer to 0, the independent variable (X) as a whole cannot explain the variability of the dependent variable (Y).

**Table 8.** Determinant Test Results R<sup>2</sup>

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446 <sup>a</sup>	.199	.175	1.73005

a. Predictors: (Constant), Hutang Jangka Pendek

b. Dependent Variable: Profitabilitas

Source: Data processed, 2019

Based on table 8 above, the R<sup>2</sup> adjusted value is 0.199. This coefficient shows that 19.9% of the profitability variable can be explained by short-term debt. While the remaining 80.1% is influenced by other variables that are not explained in this research model.

### 3.7. Problem Analysis and Solution

This is in line with the theory of Harjito and Martono (2010) which states that debt contains risks. The higher the risk of the company, the higher the level of profitability that is expected in return for the high risk and vice versa. The lower the risk of the company, the lower the level of profitability that is expected in return for the lower risk.

## V. Conclusion

Based on the data that has been collected, it can be seen that the use of short-term debt at the Kosasih Rajabasa Clinic (Kosasih Group) for the 2016-2019 period has fluctuated. Based on the data collected, it can also be seen that the company's profitability has continued to decline from 2016-2018, which means that the company's ability to generate profits is still low. from the results of the t-test, where short-term debt has  $t_{count} > t_{table}$ , namely  $2.902 > 2.0322$  with a value of Sig.  $< \alpha$ , namely  $0.006 < 0.05$ . Thus it can be concluded that there is a significant influence between short-term debt on profitability (Net Profit Margin) at the Pratama Kosasih Rajabasa Clinic (Kosasih Group) for the 2016-2018 period. The value of R<sup>2</sup> Adjusted is 0.199, which means that 19.9% of the profitability variable can be explained by short-term debt. While the remaining 80.1% is influenced by other variables that are not explained in this research model.

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# Influence of Work Motivation, Job Satisfaction and Work Discipline on Employee Performance at PT. Truba Jaga Cita

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## Abstract

This study aims to determine the influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita. The study's population was 195 employees and a sample of 131 people was determined using the slovin formula. The data used is primary data using the results of the disseminated questionnaire. The analytical techniques used in this study are multiple linear regression analysis, hypothesis test, and determination test. The results of multiple linear regression analysis and hypothesis test through F test say that there is an influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita. Hypothetical test results through t test say that first, there is a significant influence of work motivation on employee performance at PT. Truba Jaga Cita. Second, there is a significant influence of job satisfaction on employee performance at PT. Truba Jaga Cita. Third, there is a significant influence of work discipline on employee performance at PT. Truba Jaga Cita.

**Keywords:** Job Motivation, Job Satisfaction, Work Discipline, Employee Performance.

**JEL Classification :** M10, M20

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## I. Introduction

In the industrial era 4.0 it is very important to prepare human resources that are able to compete with other companies. Human resources that are able to compete are human resources that are able to increase the productivity of the company to the maximum and provide maximum profit for the company. The importance of paying attention to human resources is because human resources are driving activities in a company so that the achievement of the company's goals is also based on the capabilities of human resources in it. This capability is closely related to the resulting performance. Performance is key for every individual and organization in achieving predetermined productivity. Performance is the result of work in quality and quantity achieved by an employee in carrying out his functions in accordance with the responsibilities given to them.

Creating good employee performance as expected by the company in an effort to achieve the company's goals there are many factors that affect it, some of which are work motivation, job satisfaction and work discipline. Person's motivation to do their job is an inseparable part of achieving goals. Motivation is a factor that encourages a person to do a certain activity, so motivation is often interpreted as a driving factor in person's behavior. Every activity performed by a person must have a factor that drives the activity. Therefore, the driving factor of a person to perform a certain activity in general is the needs and desires of that person. According to Gitosudardomo in Edy Sutrisno, (2009:109) Work motivation is a process that shows individual intensity, direction, and perseverance as an effort to achieve organizational goals.

Job satisfaction is a common attitude towards a person's work, which shows the difference between the number of awards workers receive and the amount they believe they should receive according to Robbins in Wibowo (2017:415). High job satisfaction will encourage the realization of organizational objectives effectively. While low levels of job satisfaction are threats that will bring destruction or setbacks to the organization, appropriately or slowly (according to Roe and Byars in Donni Juni Priansa, 2018:291).

Work discipline in a job is the will and willingness of employees to comply with and comply with all applicable rules and regulations, both written and unwritten. By having high work discipline, the tasks and work given by the company will be completed quickly and well. Discipline also reflects the magnitude of a person's sense of responsibility for the tasks given to him or her. Work discipline will be good if the employees can maintain and foster good discipline in carrying out tasks related to the results of work. Discipline is also very related to the work of employees, because performance becomes an important tool in seeing the company's goals.

This research was conducted at PT. Truba Jaga Cita. The company is one of the companies in the group PT. Truba Jaga Engineering. PT. Truba Jaga Engineering is a leading national construction company in Indonesia. The company's business engaged

in Operations & Maintenance covers several categories, such as industrial plants, cement plants, mining plants, power plants and petrochemical plants.

Problems that exist in PT. Truba Jaga Cita when this research is carried out is the problem of performance factors, namely work motivation, job satisfaction and work discipline. Performance indicators that are a problem for employees in PT. Truba Jaga Cita was about means, standards, tools or means, motives and opportunities. Indicators of work motivation that are a problem for employees in PT. Truba Jaga Cita was about retribution, work performance, and recognition from superiors. and indicators of employee satisfaction that are a problem in PT. Truba Jaga Cita was about ability, honesty, leadership, salary level and work environment. Meanwhile, indicators of work discipline that become employee problems in PT. Truba Jaga Cita was about objectives and capabilities, punitive sanctions, and assertiveness.

In addition to the problems that occur in the company, the background in taking this title is the existence of research that has been conducted by previous researchers related to performance that is influenced by factors of work motivation, job satisfaction and work discipline. Some of these studies are research conducted by Kelimeda, et al (2018) entitled the influence of motivation, job satisfaction and work discipline towards employee performance at PT. Buma Perindahindo in Situs Tangguh Lng, Teluk Bintuni, West Papua, Indonesia. Research by Natalia Susanto (2019) entitled the influence of work motivation, job satisfaction, and work discipline on employee performance in the sales division at PT Rembaka, Surabaya. Research by Yuliandi Rusdin Tahir's research (2019) entitled work discipline, competence, empowerment, job satisfaction, and employee performance. Research by Didin (2020) entitled the influence of motivation, job satisfaction, and work discipline on employee performance at the Regional Secretariat of Maros Regency. Research by Budirianti, et al (2020) The Influence of Work Discipline, Motivation, Job Satisfaction and the Work Environment on the Performance of Contract Employees. Research by Munawaroh, et al (2020) effect of motivation and job satisfaction on employee performance through working discipline at pt. bamboo tirta engineering.

Looking at some of the previous research and adapted to the existing problems in the company, this study is drawn the formulation of the problem is the first, is there any influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita. Second, is there any influence of work motivation on employee performance at PT. Truba Jaga Cita. Third, is there any effect on employee performance on employee performance at PT. Truba Jaga Cita. And fourth is the influence of work discipline on employee performance at PT. Truba Jaga Cita.

From the formulation of the problem, the purpose of the research are To know the influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita; the effect of work motivation on employee

performance; the effect of job satisfaction on employee performance And the effect of work discipline on employee performance at PT. Truba Jaga Cita.

## II. Literature Review

### 2.1. Employee Performance

According to Armstrong and Baron in Wibowo (2017:7) Performance is the result of work that has a strong relationship with strategic objectives, consumer satisfaction, and contributing to the economy. Thus performance is about the activities of doing the work and the results achieved from the work.

According to Hersey, Blanchard and Johnson in (Wibowo, 2017:86) indicators that affect performance are goals, standards, feedback, tools and means, competencies, motives, and opportunities.

### 2.2. Work Motivation

According to Kreitner and Kinicki in Donni Juni Priansa (2018:201) states that work motivation is a psychological process displayed through behavior. As for Wood. Et. al. in Donni Juni Priansa (2018:201) states that the motivation of work describes the strength of the individual explaining how the level, direction, and efforts are made. It can be concluded that the motivation of work is a process that shows individual intensity, direction, and perseverance as an effort to achieve organizational goals.

Dimensions and indicators of work Pandi afandi (2018: 29), divided into two dimensions, the first is dimension of tranquility with indicators are retribution, working conditions and work facilities. Second is the dimension of encouragement with its indicators are work party, recognition from the boss, and the work itself.

### 2.3. Job Satisfaction

According to Edy Sutrisno (2009:74) stated that job satisfaction is an employee's attitude towards work related to the work situation, cooperation between employees, rewards received in work, and matters related to physical and psychological factors. According to Handoko in Edy Sutrisno (2009:75) suggests job satisfaction is a pleasant or unpleasant emotional state for employees to view their work. Job satisfaction reflects employees' positive work and everything they face in their work environment.

The indicators of job satisfaction according to Hasibuan (2014:202) includes are loyalty, ability, honesty, creativity, leadership, salary level, indirect job satisfaction, work environment.

## 2.4. Work Discipline

According to Edy Sutrisno (2009:88) work discipline can be seen as something of great benefit, both for the benefit of the organization and for employees. For the organization of work discipline will ensure the maintenance of discipline and smooth implementation of tasks, so that optimal results are obtained. As for employees will be obtained a pleasant work atmosphere so that it will add the spirit of work in carrying out its work. Thus, employees can carry out their duties with full awareness and can develop their energy and mind as much as possible in order to realize the goals of the organization.

According to Hasibuan (2011:194) indicators of work discipline are as follows objectives and capabilities, exemplary leadership, retribution, justice, inherent supervision, punitive sanctions, assertiveness, humanitarian relations.

## 2.5. Conceptual Framework and Hypothesis

From the background of the problem, previous research and theories related to research can be described the frame of thought of this research in below Picture:

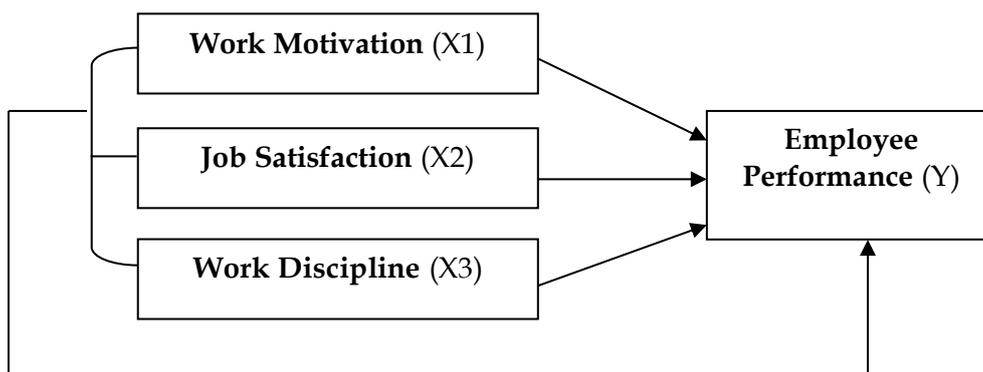


Figure 1. Conceptual Framework

From this picture can also describe the research hypothesis as follows:

1. There is an influence of work motivation, work discipline and job satisfaction on employee performance at PT. Truba Jaga Cita.
2. There is an influence of work motivation on employee performance at PT. Truba Jaga Cita.
3. There is an effect of job satisfaction on employee performance at PT. Truba Jaga Cita.
4. There is an influence of work discipline on employee performance at the PT. Truba Jaga Cita.

### III. Methodology

This study used a type of Associative research that aims to find out the relationship between two variables. Independent variables in this studied were work motivation variable as  $X_1$ , job satisfaction variable as  $X_2$  and work discipline variable as  $X_3$  while the dependent variable in this studied was employee performance as Y variable. The method of data analysis used by the authors in this study is qualitative data analysis that is anticipated.

The population in this studied ware all employees involved in the production process at PT. Truba Jaga Cita located in Muara Enim, South Sumatra. The population was 195 employees. The sample in this research of 131 employees was determined by Slovin technique using  $e = 5\%$ .

Research analysis conducted is multiple regression analysis, hypothesis test with F test and t test, and determination test. Before conducting research analysis, instrument tests are conducted on questionnaire indicators used, namely validity tests and reliability tests.

### IV. Results and Discussion

#### 4.1. Instrument Test

Based on the overall validity test the indicators used on each question in the study are said to be valid, since the  $r_{tabel} < r_{hitung}$  of 0.3060. With a valid statement on all indicators of this question, the item or statement in the questionnaire can be continued to be used as a tool in the research. Based on reliability tests, it explains that the overall indicators used on each question item in this study are said to be reliable, since the value of cronbach's alpha of all variables studied is greater than 0.60 thus the statement on the variables in the questionnaire can be continued in the study.

#### 4.2. Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the effect of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita.

**Table 1.** Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	1.886	.283	
	X1	.187	.045	.328
	X2	.158	.056	.235
	X3	.121	.057	.178

Source: Results SPSS V.25, 2020

Multiple linear regression analysis equations show the following equations:

$$Y = 1.886 + 0.187 X_1 + 0.158 X_2 + 0.121 X_3$$

A constant value of 1.886 (positive), indicated that the motivation of work and job satisfaction, work discipline, non-existent, then the performance of employees remains positive, this illustrates that employee performance still has potential capabilities even without being influenced by other variables.

The coefficient of work motivation variable of 0.187 (positive), indicated that the work motivation variable positively affects employee performance. This means that if there is an increase in the coefficient of work motivation then the employee's performance will increase, and vice versa if the coefficient of work motivation decreases then the employee's performance will be low.

The coefficient of job satisfaction variable of 0.158 (positive), indicated that the job satisfaction variable positively affects employee performance. This means that if there is an increase in the coefficient of job satisfaction then the employee's performance will increase, and vice versa if the coefficient of job satisfaction decreases then the employee's performance will be low.

The coefficient value of the work discipline variable of 0.121 (positive), indicated that the work discipline variable positively affects employee performance. This means that if there is an increase in the coefficient of work discipline then the employee performance will increase, and vice versa if the coefficient of work discipline decreases then the performance of employees will be low.

The results of the linear regression analysis above, showed that work motivation variable were more influential than other variables to affect employee performance, so it can be concluded that work motivation is the main factor of the three factors studied that affect employee performance, while work discipline and job satisfaction are supporting factors that affect employee performance.

### 4.3. Hypothesis Test

The F test (simultaneous) is conducted to determine the influence of variables studied together or simultaneously. This test was also used to answer the first problem formulation made in the previous discussion, namely knowing the influence of work motivation, work discipline, and job satisfaction on employee performance at PT. Truba Jaga Cita.

**Table 2.** F Test (Simultaneous)  
ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.733	3	.578	12.313	.000 <sup>b</sup>
	Residual	5.959	127	.047		
	Total	7.692	130			

Source: Results SPSS V.25, 2020

Specifies  $F_{table}$  with 95% confidence level and error rate ( $\alpha$ ) 5% = 0.05 with freedom level (df)  $v_1 = k-1 = 4-1 = 3$ , and  $v_2 n-k = 131-4 = 127$ , So the value of  $F_{table}$  is 2.66.

Based on the table above, it can be seen that from the  $F_{count}$  of 12,313 >  $F_{table}$  of 2.66 with a sig level of  $F_{0.000} < 0.05$  (significant), then  $H_0$  is rejected and  $H_a$  is accepted, meaning there is an influence of work motivation, work discipline, and job satisfaction on employee performance at PT. Truba Jaga Cita.

The t test (partial) was conducted to determine the influence of individually studied variables. This test was also used to answer the formulation of the second, third and fourth problems made in the previous discussion, namely whether there is an influence of work motivation on employee performance, whether there is an influence of job satisfaction on employee performance and whether there is an influence of work discipline on employee performance at PT. Truba Jaga Cita.

**Table 3.** T test (partial) Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.886	.283		6.659	.000
X1	.187	.045	.328	4.196	.000
X2	.158	.056	.235	2.827	.005
X3	.121	.057	.178	2.137	.034

Source: Results SPSS V.25, 2020

Specifies  $t_{table}$  with a confidence level of 95% and an error level ( $\alpha$ ) of 5% = 0.05 with a freedom level (df)  $v_1 = k-1 = 4-1 = 3$ , and  $v_2 n-k = 131-4 = 127$ . So the value of  $t_{table} = 1.978$ . The calculated  $t_{count}$  of 4.196 >  $t_{table}$  of 1.978 with a sig.t level of  $0.000 < 0.05$  (significant), then  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of work motivation on employee performance at PT. Truba Jaga Cita. The calculated  $t_{count}$  of 2.827 >  $t_{table}$  of 1.978 with a sig.t level of  $0.005 < 0.05$  (significant), then  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of job satisfaction on employee performance at PT. Truba Jaga Cita. The calculated  $t_{count}$  of 2,137 >  $t_{table}$  of 1,978 with a sig.t level of  $0.034 < 0.05$  (significant), then  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of work discipline on employee performance at PT. Truba Jaga Cita.

#### 4.4. Determination Coefficient Test

This coefficient of determination is used to determine how much free variable contribution is work motivation, work discipline, and job satisfaction to employee performance at PT. Truba Jaga Cita.

**Table 4.** Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.475 <sup>a</sup>	.225	.207	.21661

Source: Results SPSS V.25, 2020

$$\text{Adjusted R Square} = 0.207 \times 100\% = 20.7\%$$

Based on the calculation result in Table 4.3, adjusted R Square (coefficient of determination) was obtained by 0.207, meaning variable work motivation, job satisfaction and work discipline to employee performance at PT. Truba Jaga Cita. With a magnitude of 20.7%, while the remaining 79.3% is explained by other variables not included in this study.

#### 4.4. Discussion

##### 4.4.1. Effect of Work Motivation, Work Discipline, And Job Satisfaction on Employee Performance

Simultaneous hypothetical test results at a 95% confidence level showed that H<sub>0</sub> was rejected and H<sub>a</sub> accepted. This means that there is an influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita, Meaning that between work motivation, job satisfaction and employee work discipline are interconnected and can be side by side in contributing to affect employee performance. This is also evidenced by a coefficient of determination test that showed contributions from variables of work motivation, work discipline, and job satisfaction of 20.7% of its contribution to employee performance. The results of this study prove the conformity between performance theory and in line with previous research that states that work motivation, job satisfaction and work discipline affect employee performance.

##### 4.4.2. The Effect of Work Motivation on Employee Performance

Partial hypothetical test results at a confidence level of 95% show H<sub>0</sub> rejected and H<sub>a</sub> accepted Means there is a significant influence of work motivation on employee performance at PT. Truba Jaga Cita. The influence of work motivation on employee performance proves that work motivation has a contribution in improving employee performance because motivation is an encouragement to employees to work actively

and productively in order to achieve the company's goals. Therefore, this arises because of the motive of need that encourages the creation of a positive soul in the employee to the company and its work, and this will affect the level of performance. Because basically an employee who has a motive needs in him will always strive to achieve it, so that it will be motivated to work earnestly in order to obtain good results.

#### **4.4.3. Effect of Job Satisfaction on Employee Performance**

Partial hypothetical test results at a 95% confidence level show  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of job satisfaction on employee performance at PT. Truba Jaga Cita. The effect of job satisfaction on employee performance provides an idea that job satisfaction has a contribution in improving employee performance. Because job satisfaction itself is a feeling of pleasure or joy, or a feeling of liking someone before and after doing a job. If the employee feels happy or happy or likes to work, then the results of the work will work well. Similarly, if a person is unhappy or unhappy or does not like his work, it will affect the employee's work. Thus job satisfaction can affect performance.

#### **4.4.4. The Effect of Work Discipline on Employee Performance**

Partial hypothetical test results at a 95% confidence level show  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of work discipline on employee performance at PT. Truba Jaga Cita. The influence of work discipline on employee performance gives an idea that work discipline has a contribution in improving employee performance. Because the discipline of work itself is a factor that is in nature to discipline employees, because the discipline of work as a form of realization of the attitude of willingness and willingness of employees to comply with the values and rules set by the company. As a result of discipline it is able to create a work process that is conducive and in line with the expectations of the company, so that it will have a good impact in improving employee performance, and vice versa if the employee is not disciplined, it will have an impact on the emergence of deviant and irresponsible behaviors. Thus, it will improve the direction / objectives of achieving its work so that it will result in decreased performance.

## **V. Conclusion**

The results of the study and discussion, showed that there is an effect of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita, There is an effect of work motivation on employee performance at PT. Truba Jaga Cita, There is an effect of job satisfaction on employee performance on PT. Truba Jaga Cita, There is an effect of work discipline on employee performance on the PT. Truba Jaga Cita.

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## I. Introduction

In the industrial era 4.0 it is very important to prepare human resources that are able to compete with other companies. Human resources that are able to compete are human resources that are able to increase the productivity of the company to the maximum and provide maximum profit for the company. The importance of paying attention to human resources is because human resources are driving activities in a company so that the achievement of the company's goals is also based on the capabilities of human resources in it. This capability is closely related to the resulting performance. Performance is key for every individual and organization in achieving predetermined productivity. Performance is the result of work in quality and quantity achieved by an employee in carrying out his functions in accordance with the responsibilities given to them.

Creating good employee performance as expected by the company in an effort to achieve the company's goals there are many factors that affect it, some of which are work motivation, job satisfaction and work discipline. Person's motivation to do their job is an inseparable part of achieving goals. Motivation is a factor that encourages a person to do a certain activity, so motivation is often interpreted as a driving factor in person's behavior. Every activity performed by a person must have a factor that drives the activity. Therefore, the driving factor of a person to perform a certain activity in general is the needs and desires of that person. According to Gitosudardomo in Edy Sutrisno, (2009:109) Work motivation is a process that shows individual intensity, direction, and perseverance as an effort to achieve organizational goals.

Job satisfaction is a common attitude towards a person's work, which shows the difference between the number of awards workers receive and the amount they believe they should receive according to Robbins in Wibowo (2017:415). High job satisfaction will encourage the realization of organizational objectives effectively. While low levels of job satisfaction are threats that will bring destruction or setbacks to the organization, appropriately or slowly (according to Roe and Byars in Donni Juni Priansa, 2018:291).

Work discipline in a job is the will and willingness of employees to comply with and comply with all applicable rules and regulations, both written and unwritten. By having high work discipline, the tasks and work given by the company will be completed quickly and well. Discipline also reflects the magnitude of a person's sense of responsibility for the tasks given to him or her. Work discipline will be good if the employees can maintain and foster good discipline in carrying out tasks related to the results of work. Discipline is also very related to the work of employees, because performance becomes an important tool in seeing the company's goals.

This research was conducted at PT. Truba Jaga Cita. The company is one of the companies in the group PT. Truba Jaga Engineering. PT. Truba Jaga Engineering is a leading national construction company in Indonesia. The company's business engaged

in Operations & Maintenance covers several categories, such as industrial plants, cement plants, mining plants, power plants and petrochemical plants.

Problems that exist in PT. Truba Jaga Cita when this research is carried out is the problem of performance factors, namely work motivation, job satisfaction and work discipline. Performance indicators that are a problem for employees in PT. Truba Jaga Cita was about means, standards, tools or means, motives and opportunities. Indicators of work motivation that are a problem for employees in PT. Truba Jaga Cita was about retribution, work performance, and recognition from superiors. and indicators of employee satisfaction that are a problem in PT. Truba Jaga Cita was about ability, honesty, leadership, salary level and work environment. Meanwhile, indicators of work discipline that become employee problems in PT. Truba Jaga Cita was about objectives and capabilities, punitive sanctions, and assertiveness.

In addition to the problems that occur in the company, the background in taking this title is the existence of research that has been conducted by previous researchers related to performance that is influenced by factors of work motivation, job satisfaction and work discipline. Some of these studies are research conducted by Kelimeda, et al (2018) entitled the influence of motivation, job satisfaction and work discipline towards employee performance at PT. Buma Perindahindo in Situs Tangguh Lng, Teluk Bintuni, West Papua, Indonesia. Research by Natalia Susanto (2019) entitled the influence of work motivation, job satisfaction, and work discipline on employee performance in the sales division at PT Rembaka, Surabaya. Research by Yuliandi Rusdin Tahir's research (2019) entitled work discipline, competence, empowerment, job satisfaction, and employee performance. Research by Didin (2020) entitled the influence of motivation, job satisfaction, and work discipline on employee performance at the Regional Secretariat of Maros Regency. Research by Budirianti, et al (2020) The Influence of Work Discipline, Motivation, Job Satisfaction and the Work Environment on the Performance of Contract Employees. Research by Munawaroh, et al (2020) effect of motivation and job satisfaction on employee performance through working discipline at pt. bamboo tirta engineering.

Looking at some of the previous research and adapted to the existing problems in the company, this study is drawn the formulation of the problem is the first, is there any influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita. Second, is there any influence of work motivation on employee performance at PT. Truba Jaga Cita. Third, is there any effect on employee performance on employee performance at PT. Truba Jaga Cita. And fourth is the influence of work discipline on employee performance at PT. Truba Jaga Cita.

From the formulation of the problem, the purpose of the research are To know the influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita; the effect of work motivation on employee

performance; the effect of job satisfaction on employee performance And the effect of work discipline on employee performance at PT. Truba Jaga Cita.

## **II. Literature Review**

### **2.1. Employee Performance**

According to Armstrong and Baron in Wibowo (2017:7) Performance is the result of work that has a strong relationship with strategic objectives, consumer satisfaction, and contributing to the economy. Thus performance is about the activities of doing the work and the results achieved from the work.

According to Hersey, Blanchard and Johnson in (Wibowo, 2017:86) indicators that affect performance are goals, standards, feedback, tools and means, competencies, motives, and opportunities.

### **2.2. Work Motivation**

According to Kreitner and Kinicki in Donni Juni Priansa (2018:201) states that work motivation is a psychological process displayed through behavior. As for Wood. Et. al. in Donni Juni Priansa (2018:201) states that the motivation of work describes the strength of the individual explaining how the level, direction, and efforts are made. It can be concluded that the motivation of work is a process that shows individual intensity, direction, and perseverance as an effort to achieve organizational goals.

Dimensions and indicators of work Pandi afandi (2018: 29), divided into two dimensions, the first is dimension of tranquility with indicators are retribution, working conditions and work facilities. Second is the dimension of encouragement with its indicators are work party, recognition from the boss, and the work itself.

### **2.3. Job Satisfaction**

According to Edy Sutrisno (2009:74) stated that job satisfaction is an employee's attitude towards work related to the work situation, cooperation between employees, rewards received in work, and matters related to physical and psychological factors. According to Handoko in Edy Sutrisno (2009:75) suggests job satisfaction is a pleasant or unpleasant emotional state for employees to view their work. Job satisfaction reflects employees' positive work and everything they face in their work environment.

The indicators of job satisfaction according to Hasibuan (2014:202) includes are loyalty, ability, honesty, creativity, leadership, salary level, indirect job satisfaction, work environment.

## 2.4. Work Discipline

According to Edy Sutrisno (2009:88) work discipline can be seen as something of great benefit, both for the benefit of the organization and for employees. For the organization of work discipline will ensure the maintenance of discipline and smooth implementation of tasks, so that optimal results are obtained. As for employees will be obtained a pleasant work atmosphere so that it will add the spirit of work in carrying out its work. Thus, employees can carry out their duties with full awareness and can develop their energy and mind as much as possible in order to realize the goals of the organization.

According to Hasibuan (2011:194) indicators of work discipline are as follows objectives and capabilities, exemplary leadership, retribution, justice, inherent supervision, punitive sanctions, assertiveness, humanitarian relations.

## 2.5. Conceptual Framework and Hypothesis

From the background of the problem, previous research and theories related to research can be described the frame of thought of this research in below Picture:

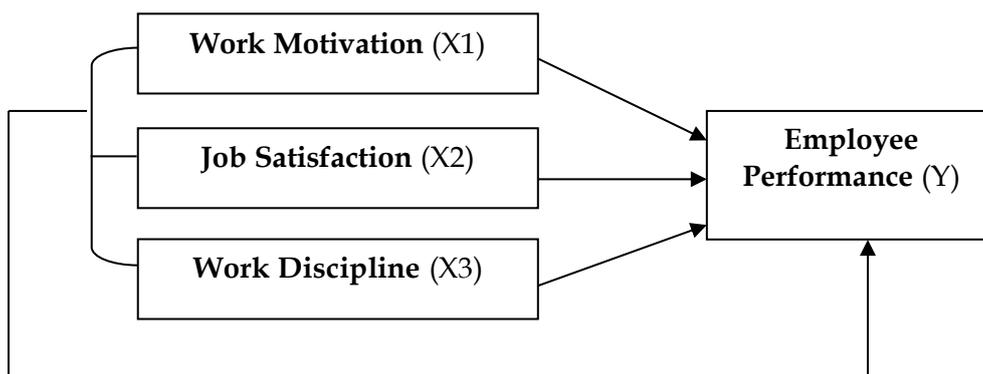


Figure 1. Conceptual Framework

From this picture can also describe the research hypothesis as follows:

1. There is an influence of work motivation, work discipline and job satisfaction on employee performance at PT. Truba Jaga Cita.
2. There is an influence of work motivation on employee performance at PT. Truba Jaga Cita.
3. There is an effect of job satisfaction on employee performance at PT. Truba Jaga Cita.
4. There is an influence of work discipline on employee performance at the PT. Truba Jaga Cita.

### III. Methodology

This study used a type of Associative research that aims to find out the relationship between two variables. Independent variables in this studied were work motivation variable as  $X_1$ , job satisfaction variable as  $X_2$  and work discipline variable as  $X_3$  while the dependent variable in this studied was employee performance as Y variable. The method of data analysis used by the authors in this study is qualitative data analysis that is anticipated.

The population in this studied ware all employees involved in the production process at PT. Truba Jaga Cita located in Muara Enim, South Sumatra. The population was 195 employees. The sample in this research of 131 employees was determined by Slovin technique using  $e = 5\%$ .

Research analysis conducted is multiple regression analysis, hypothesis test with F test and t test, and determination test. Before conducting research analysis, instrument tests are conducted on questionnaire indicators used, namely validity tests and reliability tests.

### IV. Results and Discussion

#### 4.1. Instrument Test

Based on the overall validity test the indicators used on each question in the study are said to be valid, since the  $r_{tabel} < r_{hitung}$  of 0.3060. With a valid statement on all indicators of this question, the item or statement in the questionnaire can be continued to be used as a tool in the research. Based on reliability tests, it explains that the overall indicators used on each question item in this study are said to be reliable, since the value of cronbach's alpha of all variables studied is greater than 0.60 thus the statement on the variables in the questionnaire can be continued in the study.

#### 4.2. Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the effect of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita.

**Table 1.** Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	1.886	.283	
	X1	.187	.045	.328
	X2	.158	.056	.235
	X3	.121	.057	.178

Source: Results SPSS V.25, 2020

Multiple linear regression analysis equations show the following equations:

$$Y = 1.886 + 0.187 X_1 + 0.158 X_2 + 0.121 X_3$$

A constant value of 1.886 (positive), indicated that the motivation of work and job satisfaction, work discipline, non-existent, then the performance of employees remains positive, this illustrates that employee performance still has potential capabilities even without being influenced by other variables.

The coefficient of work motivation variable of 0.187 (positive), indicated that the work motivation variable positively affects employee performance. This means that if there is an increase in the coefficient of work motivation then the employee's performance will increase, and vice versa if the coefficient of work motivation decreases then the employee's performance will be low.

The coefficient of job satisfaction variable of 0.158 (positive), indicated that the job satisfaction variable positively affects employee performance. This means that if there is an increase in the coefficient of job satisfaction then the employee's performance will increase, and vice versa if the coefficient of job satisfaction decreases then the employee's performance will be low.

The coefficient value of the work discipline variable of 0.121 (positive), indicated that the work discipline variable positively affects employee performance. This means that if there is an increase in the coefficient of work discipline then the employee performance will increase, and vice versa if the coefficient of work discipline decreases then the performance of employees will be low.

The results of the linear regression analysis above, showed that work motivation variable were more influential than other variables to affect employee performance, so it can be concluded that work motivation is the main factor of the three factors studied that affect employee performance, while work discipline and job satisfaction are supporting factors that affect employee performance.

### 4.3. Hypothesis Test

The F test (simultaneous) is conducted to determine the influence of variables studied together or simultaneously. This test was also used to answer the first problem formulation made in the previous discussion, namely knowing the influence of work motivation, work discipline, and job satisfaction on employee performance at PT. Truba Jaga Cita.

**Table 2.** F Test (Simultaneous)  
ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.733	3	.578	12.313	.000 <sup>b</sup>
	Residual	5.959	127	.047		
	Total	7.692	130			

Source: Results SPSS V.25, 2020

Specifies  $F_{table}$  with 95% confidence level and error rate ( $\alpha$ ) 5% = 0.05 with freedom level (df)  $v_1 = k-1 = 4-1 = 3$ , and  $v_2 n-k = 131-4 = 127$ , So the value of  $F_{table}$  is 2.66.

Based on the table above, it can be seen that from the  $F_{count}$  of 12,313 >  $F_{table}$  of 2.66 with a sig level of  $F 0.000 < 0.05$  (significant), then  $H_0$  is rejected and  $H_a$  is accepted, meaning there is an influence of work motivation, work discipline, and job satisfaction on employee performance at PT. Truba Jaga Cita.

The t test (partial) was conducted to determine the influence of individually studied variables. This test was also used to answer the formulation of the second, third and fourth problems made in the previous discussion, namely whether there is an influence of work motivation on employee performance, whether there is an influence of job satisfaction on employee performance and whether there is an influence of work discipline on employee performance at PT. Truba Jaga Cita.

**Table 3.** T test (partial) Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1.886	.283			6.659	.000
X1	.187	.045	.328		4.196	.000
X2	.158	.056	.235		2.827	.005
X3	.121	.057	.178		2.137	.034

Source: Results SPSS V.25, 2020

Specifies  $t_{table}$  with a confidence level of 95% and an error level ( $\alpha$ ) of 5% = 0.05 with a freedom level (df)  $v_1 = k-1 = 4-1 = 3$ , and  $v_2 n-k = 131-4 = 127$ . So the value of  $t_{table} = 1.978$ . The calculated  $t_{count}$  of 4.196 >  $t_{table}$  of 1.978 with a sig.t level of  $0.000 < 0.05$  (significant), then  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of work motivation on employee performance at PT. Truba Jaga Cita. The calculated  $t_{count}$  of 2.827 >  $t_{table}$  of 1.978 with a sig.t level of  $0.005 < 0.05$  (significant), then  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of job satisfaction on employee performance at PT. Truba Jaga Cita. The calculated  $t_{count}$  of 2,137 >  $t_{table}$  of 1,978 with a sig.t level of  $0.034 < 0.05$  (significant), then  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of work discipline on employee performance at PT. Truba Jaga Cita.

#### 4.4. Determination Coefficient Test

This coefficient of determination is used to determine how much free variable contribution is work motivation, work discipline, and job satisfaction to employee performance at PT. Truba Jaga Cita.

**Table 4.** Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.475 <sup>a</sup>	.225	.207	.21661

Source: Results SPSS V.25, 2020

$$\text{Adjusted R Square} = 0.207 \times 100\% = 20.7\%$$

Based on the calculation result in Table 4.3, adjusted R Square (coefficient of determination) was obtained by 0.207, meaning variable work motivation, job satisfaction and work discipline to employee performance at PT. Truba Jaga Cita. With a magnitude of 20.7%, while the remaining 79.3% is explained by other variables not included in this study.

#### 4.4. Discussion

##### 4.4.1. Effect of Work Motivation, Work Discipline, And Job Satisfaction on Employee Performance

Simultaneous hypothetical test results at a 95% confidence level showed that  $H_0$  was rejected and  $H_a$  accepted. This means that there is an influence of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita, Meaning that between work motivation, job satisfaction and employee work discipline are interconnected and can be side by side in contributing to affect employee performance. This is also evidenced by a coefficient of determination test that showed contributions from variables of work motivation, work discipline, and job satisfaction of 20.7% of its contribution to employee performance. The results of this study prove the conformity between performance theory and in line with previous research that states that work motivation, job satisfaction and work discipline affect employee performance.

##### 4.4.2. The Effect of Work Motivation on Employee Performance

Partial hypothetical test results at a confidence level of 95% show  $H_0$  rejected and  $H_a$  accepted Means there is a significant influence of work motivation on employee performance at PT. Truba Jaga Cita. The influence of work motivation on employee performance proves that work motivation has a contribution in improving employee performance because motivation is an encouragement to employees to work actively

and productively in order to achieve the company's goals. Therefore, this arises because of the motive of need that encourages the creation of a positive soul in the employee to the company and its work, and this will affect the level of performance. Because basically an employee who has a motive needs in him will always strive to achieve it, so that it will be motivated to work earnestly in order to obtain good results.

#### **4.4.3. Effect of Job Satisfaction on Employee Performance**

Partial hypothetical test results at a 95% confidence level show  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of job satisfaction on employee performance at PT. Truba Jaga Cita. The effect of job satisfaction on employee performance provides an idea that job satisfaction has a contribution in improving employee performance. Because job satisfaction itself is a feeling of pleasure or joy, or a feeling of liking someone before and after doing a job. If the employee feels happy or happy or likes to work, then the results of the work will work well. Similarly, if a person is unhappy or unhappy or does not like his work, it will affect the employee's work. Thus job satisfaction can affect performance.

#### **4.4.4. The Effect of Work Discipline on Employee Performance**

Partial hypothetical test results at a 95% confidence level show  $H_0$  was rejected and  $H_a$  accepted. This means that there is a significant influence of work discipline on employee performance at PT. Truba Jaga Cita. The influence of work discipline on employee performance gives an idea that work discipline has a contribution in improving employee performance. Because the discipline of work itself is a factor that is in nature to discipline employees, because the discipline of work as a form of realization of the attitude of willingness and willingness of employees to comply with the values and rules set by the company. As a result of discipline it is able to create a work process that is conducive and in line with the expectations of the company, so that it will have a good impact in improving employee performance, and vice versa if the employee is not disciplined, it will have an impact on the emergence of deviant and irresponsible behaviors. Thus, it will improve the direction / objectives of achieving its work so that it will result in decreased performance.

## **V. Conclusion**

The results of the study and discussion, showed that there is an effect of work motivation, job satisfaction and work discipline on employee performance at PT. Truba Jaga Cita, There is an effect of work motivation on employee performance at PT. Truba Jaga Cita, There is an effect of job satisfaction on employee performance on PT. Truba Jaga Cita, There is an effect of work discipline on employee performance on the PT. Truba Jaga Cita.

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# Effect of Organizational Commitment, Compensation and Job Satisfaction on Employee Performance Through Organizational Citizenship Behavior In Bank BPD DIY Employees Senopati Branch Office

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## Abstract

This study aims to determine the factors that affect the performance at the BANK BPD DIY Senopati branch office. The method in this research is accidental sampling. The analytical method used is the classical assumption test, t-test and Sobel test. Based on the research results, it is known that commitment has a significant positive effect on OCB, compensation has a significant effect on OCB, and satisfaction does not affect OCB, while commitment has a significant effect on employee performance, compensation has a significant positive effect on performance, job satisfaction has no effect on performance. OCB has a positive effect on employee performance. commitment has a significant positive effect on performance with the OCB variable as an intervening variable, compensation has a significant effect on performance with OCB as an internal variable has no significant effect on performance through OCB As an intervening variable and job satisfaction It is expected that this research can be used to measure commitment, compensation, and employee satisfaction as well as OCB on employee performance behavior.

**Keywords:** Organizational Commitment, Compensation, Job Satisfaction, OCB, Employee Performance.

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## I. Introduction

Human resources (HR/employees) play a very dominant role in the activities or activities of the company, where the success of the company in the objectives set is very much dependent on the ability of human resources (employees) to carry out their assigned duties. The company must have competent human resources and have a high level of performance in carrying out the duties assigned by the organization. Performance is the result of work in quality and quantity achieved by an employee in carrying out his duties with the responsibilities assigned to him according to (Mangkunegara, 2011).

The problem regarding performance is a problem that will always be faced by company management. Therefore, management needs to know about the factors that affect employee performance. The factors that can affect the performance of these employees will make the company management able to take various policies that are needed so that it can improve the performance of its employees so that it is in line with company expectations. Factors affecting employee performance include Organizational Citizenship Behavior, compensation, job satisfaction, and organizational commitment.

Organizational Citizenship Behavior (OCB) is defined as employee behavior that exceeds what is standardized (Darmawati, 2013). Good employees (good citizens) tend to display OCB in their work environment, so organizations will better with employees who act OCB. Organizational Citizenship Behavior can arise from various factors in the organization, including due to employee job satisfaction and high organizational commitment (Robbin and Judge, 2012).

To improve employee performance, an employee is led to have good organizational commitment. "Organizational commitment is defined as a condition in which an individual side with the organization and the goals and wants to maintain membership in the organization" (Robbins and Judge, 2009: 100). "Commitment is defined as a person's ability to carry out his obligations, be responsible and a promise that limits someone from doing something" (Fitriastuti, 2013: 104). Employees with high commitment can show optimal performance. A person who joins an organization is required to commit him. Organizational commitment does not only mean passive loyalty but also involves an active relationship and the desire of employees to make meaningful contributions to the organization. The higher the commitment, the higher one's commitment to be directed towards actions that are by employee performance standards. This is supported by previous research conducted (Fitriastuti, 2013), which states that organizational commitment has a very large effect on one's performance. An employee will work optimally, using his abilities and skills with enthusiasm, when he has a high organizational commitment.

Apart from organizational commitment, the factor that affects employee performance is the compensation factor. Every employee or individual who works in a company has the desire to get a salary that is the expectations, if they get a salary that matches their expectations, they will be more enthusiastic about working. "Compensation is all opinions in the form of money, direct or indirect goods received by employees in return for services provided to the company" (Hasibuan, 2007: 118). Providing compensation from the company to employees has an impact on job satisfaction so that the compensation from the company will foster employee motivation to work according to organizational goals. If employees perceive compensation as inadequate, work performance, motivation, and job satisfaction will dramatically decrease. This is supported by the results of research conducted by Fitrianasari, Nimran, and Utami (2013) which have a significant effect on employee performance.

Job satisfaction is a positive feeling about one's job which is the result of an evaluation of its characteristics (Robbin and Judge 2012). Satisfied employees prefer their job situation to dissatisfied employees (Ristiana, 2013). Commitment has an important role, especially in a person's performance at work, this is due to a commitment that becomes a reference and encouragement that makes them more responsible for their obligations (Brodoastuti, 2016). A strong commitment allows each employee to try to face the challenges and emphasize the existing ones. Success in facing these challenges will foster a sense of pride in the organization (Minarsih, 2012).

## **II. Literature Review**

### **2.1. Organizational Commitment**

Organizational commitment is an emotional bond between employees and the organization that arises because of trust, the willingness to achieve a goal and the desire to maintain membership as part of the organization and this is what makes employees stay in an organization in both pleasant and unhappy conditions. The strong commitment of employees to the company also determines the nature and behavior of these employees while in the company. Organizational commitment encourages employees to keep their jobs and show the results they should. Employees who have a high commitment to the company tend to show good quality, more totality in their work, and low turnover rates for the company (Akbar, 2017).

### **2.2. Compensation**

The definition of compensation according to Nawawi (2001: 315) is an award/reward for workers who have contributed to realizing their goals, through activities called work. According to Hasibuan (2005: 118) compensation is all income in the form of money, direct or indirect goods received by employees as compensation for services provided to the company. Sofyandi (2013: 159) argues that compensation is a form of cost that must be incurred by the company in the hope that the company will receive

compensation in the form of work performance from its employees of course, that the work performance provided by employees must be greater than the compensation issued by the company.

### **2.3. Job Satisfaction**

Satisfied employees prefer their job situation to dissatisfied employees (Ristiana, 2013). Job satisfaction by Locke (1976) is a positive emotion that is felt as a result of the recognition of the success of the work done (Baporikar, 2017). Job satisfaction is a key element in explaining behavior in organizations and is the element most often researched in human resource management (Culibrk et al. 2018) Job satisfaction can be assessed both globally, namely based on general working conditions or at the individual level, namely based on aspects of individual work itself, including job appreciation, communication, working conditions, promotion opportunities, job recognition, supervision and so on (Spector, 1997; quoted by Baporikar, 2017). The characteristics of achieving a person's job satisfaction can be seen based on the emotional condition of an employee based on the results of the job appraisal, affective closeness to the job at hand, and the employee's attitude towards their job (Kumari & Pandey, 2011; quoted by Frempong, Agbenyo, Darko, 2018).

### **2.4. Organizational Citizenship Behavior**

Organizational Citizenship Behavior (OCB) is defined as employee behavior that exceeds what is standardized (Darmawati, 2013). Good employees (good citizens) tend to display OCB in their work environment so that organizations will be better off with employees acting OCB. Organizational Citizenship Behavior can arise from various factors in the organization, including due to employee job satisfaction and high organizational commitment (Robbin and Judge, 2012). Organizational Citizenship Behavior is a positive behavior, in this case, the employee's behavior in helping other individual jobs as shown by someone in an organization or company (Nurhayati, Minarsi, and Wulan, 2016: 10). Organizational citizenship behavior (OCB) is considered as a behavior in the workplace that is following personal judgments that exceed a person's basic job requirements. OCB can also be described as behavior that exceeds task demand. Gibson, et al (2011) argue that organizational citizenship behavior is very important in organizational survival.

### **2.5. Employee Performance**

Employee performance is the result of work in quality and quantity achieved by an employee in carrying out his duties by the responsibilities assigned to him. Employee performance variables are measured using a Likert scale. Employee performance indicators are as follows: work quantity, work quality, time utilization, attendance, and cooperation (Mathis and Jackson, 2006: 78). Mangkunegara Performance (2009) "Employee performance as work performance or output, both in quality and quantity achieved by employees of the period association in carrying out their work duties

following the responsibilities assigned to them. The goal is to improve or improve organizational performance through improving the performance of the organization's HR. So, to anticipate the loss of orientation to a more meaningful life, HR uses noble values as a guide for professional life and individual performance. Employee Performance Appraisal according to Budihardjo (2014) is the main key, company development. There are two parties involved in the performance appraisal process, namely (company) and employees (HR), employee performance appraisal has a positive impact on both parties, becoming a professional in their field.

## 2.6. Hypothesis Development

Organizational commitment encourages employees to maintain their work and show the results they should. Employees who have a high commitment to the company tend to show good quality, more totality in their work, and low turnover rates for the company (Akbar, 2017). In previous research, Darmawati, A., & Indartono, S. (2015) showed that the application of organizational commitment has a positive and significant effect on the organizational OCB of Agent Jaya Hotel employees.

**H1: Commitment has a significant positive effect on organizational citizenship.**

The definition of compensation according to Nawawi (2001: 315) is an award/reward for workers who have contributed to realizing their goals, through activities called work. According to Hasibuan (2005: 118) compensation is all income in the form of money, direct or indirect goods received by employees in return for services provided to the company. In previous research by Octaviani, EN (2018) Compensation (X1) and Career Development (X2) ) has a significant effect on Organizational Citizenship Behavior.

**H2: competence has a significant positive effect on OCB.**

Satisfied employees prefer their job situation to dissatisfied employees (Ristiana, 2013). Latief, A., Syardiansah, S., & Safwan, M. (2019) organizational commitment and job satisfaction have a positive effect on the performance of the organizational commitment variables and employees of the City Health BPJS, job satisfaction affects Langsa's performance.

**H3: Job satisfaction has a significant positive effect on OCB**

Organizational Citizenship Behavior (OCB) is defined as employee behavior that exceeds what is standardized (Darmawati, 2013). Good employees (good citizens) tend to display OCB in their work environment so that organizations will be better off with employees acting OCB. Organizational Citizenship Behavior can arise from various factors in the organization, including due to employee job satisfaction and high organizational commitment (Robbin and Judge, 2012). In Suzana, A. (2017).

Organizational citizenship behavior with employee performance is at a very strong level which is indicated by the number 0.865 in a positive direction.

**H4: OCB has a significant positive effect on employee performance**

### III. Methodology

Based on this research, the population in this is all employees of the Bank BPD DIY Senopati branch office with a total of 100 employees. The sample in this study 52 employees who work at Bank BPD DIY, with an accidental sampling technique, using a questionnaire instrument. The method used is the Slovin method and the data analysis uses the single test.

### IV. Results and Discussion

#### 4.1. Validity and Reliability Test

The validity test results show the corrected item-total correlation value > from r-table (0.230) or valid. The variable data in this study has been tested and has a good reliability value with a significance level of 5% and Cronbach's alpha based on std. > 0.06.

#### 4.2. Classic Assumptions Test

Table 1 shows that the regression model following the Sobel test stages has met multicollinearity (VIF and tolerance), heteroscedasticity (Glejser test), and normality (Kolmogorov-Smirnov test).

**Table 1.** Classical Assumption Test

Mdl	Var.	Multikolinierity			glejser Test		Kolmogorov-Smirnov test	
		Free	Bound	Tol.	VIP	T	Sig.	Asymp. sig (2-tailed)
1	commitment	ocb	.919	1.088	1.613	.111	.097	.200
2	compensation	ocb	.922	1.085	-.621	.536	.097	.200
3	satisfaction	ocb	.988	1.012	1.964	.053	.097	.200
4	commitment	kk	.844	1.184	-1.112	.269	.068	.200
5	compensation	kk	.909	1.101	.415	.680	.068	.200
6	Satisfaction	kk	.985	1.015	-.477	.635	.068	.200
7	Ocb	kk	.917	1.091	.209	.835	.068	.200

The Kolmogorov-Smirnov Z test result of the first regression is 0.200 with Asymp. sig. (2-tailed) 0.097, the second Kolmogorov-Smirnov Z regression test is 0.200 with Asymp.sig. (2-tailed) 0.68, the results of the first regression Glajser test show the sig

value. Commitment (0.111), the value of sig. compensation (0.536), satisfaction test value (0.53), and the second regression glacier test shows the sig value. Commitment (0.269), compensation (0.680), satisfaction (0.635) and OCB (0.835) > 0.05 or not significant, which means there is no heteroscedasticity in the regression model. The multicollinearity test results show the tolerance value of the first regression of commitment (0.919), the multicollinearity test shows the tolerance value of competence (0.922), and satisfaction (0.988). Tolerance value from the regression of the two commitments (0.844), competence (0.909), job satisfaction (0.985) and OCB (0, 0.917) > 0.10 <10, which means there is no multicollinearity.

### 4.3. Hypothesis Test

The results of hypothesis testing in table 5 show that H1 is accepted with a probability value of 0.045, H2 is accepted with a probability value of 0.030, H3 is rejected with a probability value of 0.692 > 0.05. The test results H4, H5 are accepted with a probability value of 0.000 and H 6 is rejected with a probability of 0.350 > from 0.05, and H7 is accepted with a probability value of 0.043. Whereas H8 with the single-test test with a one-tailed probability value of 0.015 <0.05, so that the OCB variable affects a variable intervening commitment to employee performance. Hypothesis 9 with a one-tailed probability value of 0.005 <0.05, thus OCB can affect a compensation intervening variable on performance. and the last Hypothesis 10 with a one-tailed probability value of 0.219 > 0.05, then the OCB variable cannot affect an intervening variable of satisfaction on employee performance.

**Table 2.** Hypothesis Testing

	Var		Stand. Coeff.	t	Sig.	Koef. Determinat
	Free	Bound	Beta			
H1	Commitment	OCB	.297	2.062	.045	.226
H2	Competence	OCB	.110	2.115	.030	.226
H3	Satisfaction	OCB	.055	.398	.692	.226
H4	Commitment	KK	.437	3.854	.000	.445
H5	Competence	KK	.426	3.891	.000	.445
H6	Satisfaction	KK	.099	.944	.350	.445
H7	Ocb	KK	.360	2.330	.043	.445

Hypothesis testing 8, 9, and 10 used the Sobel test (Sobel, 1982). The results are as follows:

**Table 3.** Sobel Test

Variable	One- tailed probability	Sig < 0,05	Information
KO.OCB,KK	0,015	0,05	Accepted
KOM,OCB,KK	0,005	0,05	Accepted
KEP,OCB,KK	0.219	0,05	Rejected

### 4.3. Discussion

The first hypothesis testing shows that there is a positive and significant influence on organizational commitment to the OCB of PT Bank BPD DIY employees. The level of significance for the organizational commitment variable is 0.045 ( $p < 0.05$ ) and t count is 2.062 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1.664 < 2.062$ ) and the significance  $0.045 / 2 = 0.025 < 0.05$ , then hypothesis 1 is accepted. Respondents stated that I have a desire to become a reliable employee for a BPD bank (KO5) with an average of 4.35 higher than the other average with 23 respondents who answered strongly agree, 26 respondents answered agreed, and 1 respondent answered neutral, and 2 respondent answered disagree. The lowest answer is (KO1) I agree with the organization's goals with an average of 4.06 with 19 respondents answering strongly agree, 19 respondents answering agree, 4 respondents answering neutral, and 6 respondents answering disagreeing. So that the employees of Bank BPD DIY commit to the organization with the desire to become reliable employees in advancing the organization.

The second hypothesis testing shows that there is no significant effect of compensation on OCB with a significance level for the compensation variable of 0.030 ( $p < 0.05$ ) and t count of 2.115 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1.664 > 2.115$ ) and significance  $0.030 / 2 = 0.015 < 0.05$ , then hypothesis 2 is accepted. Compensation was assessed by respondents as follows: Bank BPD provides promotion guarantees for employees (KOM5) with an average of 3.98 higher than the other average with 12 respondents who answered strongly agree, 29 respondents answered agree, and 9 respondents answered neutral, and 2 respondent answered disagree. The lowest answer was (KS2) which stated that BPD Bank provided health insurance with an average of 2.88 with 6 respondents answering strongly agree, 9 respondents answered agreeing, 16 respondents, answered neutral, 15 respondents answered disagree, and 6 respondents answered strongly disagreed.

The third hypothesis testing shows that there is an insignificant influence. The level of significance for the job satisfaction variable is 0.692 ( $p > 0.05$ ) and t count is .398 (negative), it can be concluded that  $t_{table} > t_{count}$  ( $1.664 > .398$ ) and the significance  $0.692 / 2 = 0.346 > 0.05$ , then hypothesis 3 is rejected. Job satisfaction with employee

OCB. Job satisfaction in the respondent's value is as follows: Bank BPD DIY I am satisfied with the results of the work I have done so far (KEP4) with an average of 4.25 higher than the other average with 22 respondents answered very agree, 22 respondents, answered agree, 7 respondents answered neutral and 1 respondent answered disagree, the lowest answer was (KEP1) I was satisfied with the salary I received with an average of 3.62 with 7 respondents answered strongly agree, 21 respondents answered agreed, 22 respondents, answered neutral, 1 respondent answered disagree, and 1 respondent answered strongly disagree.

Testing the fourth hypothesis shows that there is a positive and significant effect of organizational commitment on employee performance. The level of significance for the organizational commitment variable is 0,000 ( $p < 0.05$ ) and t count is 3,834 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1,664 < 3,834$ ) and the significance  $0,000 / 2 = 0 < 0.05$ , then hypothesis 4 is accepted. Organizational commitment is an emotional bond between employees and the organization that arises because of trust, the willingness to achieve a goal and the desire to maintain membership as part of the organization and this is what makes employees stay in an organization in both pleasant and unhappy conditions. So that with the existence of commitment from employees will improve employee performance and will improve organizational performance for the better and increase the profitability of the organization.

The fifth hypothesis testing shows that there is a positive effect of compensation on the employee performance of PT BPD DIY. The level of significance for the compensation variable on employee performance is 0.000 ( $p < 0.05$ ) and t count is 3,891 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1,664 > 3,891$ ) and a significance of  $0,000 / 2 = 0.000 < 0.05$ , then hypothesis 5 is accepted. Compensation is a form of cost that must be incurred by the company in the hope that the company will receive rewards in the form of work performance from its employees (of course that the work performance provided by employees must be greater than the compensation issued by the company). The greater the compensation received by employees, the employees will feel happy with the company and employees will have a loyal nature to the company, so it is hoped that the compensation provided by the company for employees will further improve employee performance.

The sixth hypothesis testing shows that there is a negative and insignificant effect of job satisfaction on employee performance. The level of significance for the variable job satisfaction with performance is .350 ( $p > 0.05$ ) and t count is .944 (negative), it can be concluded that  $t_{table} > t_{count}$  ( $1.664 > .944$ ) and the significance of  $0.350 / 2 = < 0.175$ , then hypothesis 6 is rejected. Job satisfaction can be assessed both globally, namely based on working conditions in general or at the individual level, namely based on aspects of the individual's work itself, including job appreciation, communication, working conditions, promotion opportunities, job recognition, supervision, and so on. So that job satisfaction needs to be noticed by a BPD DIY Bank management to further

improve employee job satisfaction, such as giving appreciation to employees, so that employees will feel themselves being noticed by their superiors so that employees will have the intention to improve their performance.

The seventh hypothesis testing shows that there is a significant effect of OCB on employee performance. The level of significance for the variable organizational citizenship behavior towards performance is 0.043 ( $p < 0.05$ ) and  $t$  count is 2.330 (positive), it can be concluded that  $t$  table  $< t$  count ( $1.664 > 2.330$ ) and significance  $0.043 / 2 = 0.021 < 0.05$ , then hypothesis 7 is accepted. Organizational Citizenship Behavior is a positive behavior, in this case, the employee's behavior in helping other individual work is shown by someone in an organization or company, the loyalty behavior that employees have is already at a good level, proven by the employees of BPD DIY bank that are satisfied with compensation provided by the organization so that it is necessary to increase continuous encouragement so that it is even better in maintaining employee loyalty of BANK BPD DIY, the more loyal employees to the organization it will improve organizational performance and will increase the profitability of the organization.

Testing the eighth hypothesis shows that there is a positive and significant effect of organizational commitment on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. Thus OCB can mediate organizational commitment to employee performance as evidenced by data processing using Sobel Tests with a one-tailed probability value of 0.000  $<$  from 0.05 so it can be concluded that OCB can mediate Organizational Commitment to Employee Performance.

The ninth hypothesis testing shows that there is a positive and significant effect of compensation on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. Thus OCB can mediate compensation to employee performance as evidenced by data processing using Sobel Tests with a one-tailed probability value of 0.005  $<$  from 0.05 so that it can be concluded that OCB can mediate compensation to employee performance.

The tenth hypothesis testing shows that there is an insignificant influence on job satisfaction on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. Thus OCB cannot mediate job satisfaction on employee performance as evidenced by data processing using Sobel Tests with a one-tailed probability value of 0.209  $>$  from 0.05 so it can be concluded that OCB cannot mediate job satisfaction on employee performance.

## V. Conclusion and Recommendation

### 5.1. Conclusion

Based on the results of the analysis discussed in the previous chapter, the following conclusions can be drawn: There is a positive and significant influence. Organizational commitment to OCB for employees of PT Bank BPD DIY. There is a significant positive effect of Compensation on OCB for employees of PT Bank BPD DIY. Which is not significant Job satisfaction on OCB for employees of PT Bank BPD DIY. There is a significant positive effect of Organizational Commitment on employee performance of employees of PT Bank BPD DIY. There is a significant positive effect of Compensation on employee performance of employees of PT Bank BPD DIY. There is a significant influence of negative insignificant Job satisfaction on employee performance of PT Bank BPD DIY there is a positive and significant effect of OCB on employee performance with employees of PT Bank BPD DIY. There is a positive and significant effect of organizational commitment on employee performance with OCB as an intervening variable for employees of PT bank BPD DIY. There is a positive and significant effect of compensation on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. There is no significant effect of job satisfaction on employee performance with OB as an intervening variable for employees of PT Bank BPD DIY.

### 5.2. Recommendation

This research should be more varied so that it can be developed on variables that are thought to have a deeper influence and apply previous results such as job satisfaction with OCB through motivation as an intervening variable. For BPD DIY Bank Management, Employees in various Sector Units to increase their commitment to themselves to improve the organization to continue to maintain its existence. For BPD DIY Bank employees, they should show the behavior of helping others voluntarily which is not their duty and obligation (Courtesy). Voluntary behavior to increase work creatively so that the organization can increase and exceed the expected targets (Conscientiousness).

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# Effect of Organizational Commitment, Compensation and Job Satisfaction on Employee Performance Through Organizational Citizenship Behavior In Bank BPD DIY Employees Senopati Branch Office

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## Abstract

This study aims to determine the factors that affect the performance at the BANK BPD DIY Senopati branch office. The method in this research is accidental sampling. The analytical method used is the classical assumption test, t-test and Sobel test. Based on the research results, it is known that commitment has a significant positive effect on OCB, compensation has a significant effect on OCB, and satisfaction does not affect OCB, while commitment has a significant effect on employee performance, compensation has a significant positive effect on performance, job satisfaction has no effect on performance. OCB has a positive effect on employee performance. commitment has a significant positive effect on performance with the OCB variable as an intervening variable, compensation has a significant effect on performance with OCB as an internal variable has no significant effect on performance through OCB As an intervening variable and job satisfaction It is expected that this research can be used to measure commitment, compensation, and employee satisfaction as well as OCB on employee performance behavior.

**Keywords:** Organizational Commitment, Compensation, Job Satisfaction, OCB, Employee Performance.

**JEL Classification :** L20, M52

**Type of paper:** Research Paper

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## I. Introduction

Human resources (HR/employees) play a very dominant role in the activities or activities of the company, where the success of the company in the objectives set is very much dependent on the ability of human resources (employees) to carry out their assigned duties. The company must have competent human resources and have a high level of performance in carrying out the duties assigned by the organization. Performance is the result of work in quality and quantity achieved by an employee in carrying out his duties with the responsibilities assigned to him according to (Mangkunegara, 2011).

The problem regarding performance is a problem that will always be faced by company management. Therefore, management needs to know about the factors that affect employee performance. The factors that can affect the performance of these employees will make the company management able to take various policies that are needed so that it can improve the performance of its employees so that it is in line with company expectations. Factors affecting employee performance include Organizational Citizenship Behavior, compensation, job satisfaction, and organizational commitment.

Organizational Citizenship Behavior (OCB) is defined as employee behavior that exceeds what is standardized (Darmawati, 2013). Good employees (good citizens) tend to display OCB in their work environment, so organizations will better with employees who act OCB. Organizational Citizenship Behavior can arise from various factors in the organization, including due to employee job satisfaction and high organizational commitment (Robbin and Judge, 2012).

To improve employee performance, an employee is led to have good organizational commitment. "Organizational commitment is defined as a condition in which an individual side with the organization and the goals and wants to maintain membership in the organization" (Robbins and Judge, 2009: 100). "Commitment is defined as a person's ability to carry out his obligations, be responsible and a promise that limits someone from doing something" (Fitriastuti, 2013: 104). Employees with high commitment can show optimal performance. A person who joins an organization is required to commit him. Organizational commitment does not only mean passive loyalty but also involves an active relationship and the desire of employees to make meaningful contributions to the organization. The higher the commitment, the higher one's commitment to be directed towards actions that are by employee performance standards. This is supported by previous research conducted (Fitriastuti, 2013), which states that organizational commitment has a very large effect on one's performance. An employee will work optimally, using his abilities and skills with enthusiasm, when he has a high organizational commitment.

Apart from organizational commitment, the factor that affects employee performance is the compensation factor. Every employee or individual who works in a company has the desire to get a salary that is the expectations, if they get a salary that matches their expectations, they will be more enthusiastic about working. "Compensation is all opinions in the form of money, direct or indirect goods received by employees in return for services provided to the company" (Hasibuan, 2007: 118). Providing compensation from the company to employees has an impact on job satisfaction so that the compensation from the company will foster employee motivation to work according to organizational goals. If employees perceive compensation as inadequate, work performance, motivation, and job satisfaction will dramatically decrease. This is supported by the results of research conducted by Fitrianasari, Nimran, and Utami (2013) which have a significant effect on employee performance.

Job satisfaction is a positive feeling about one's job which is the result of an evaluation of its characteristics (Robbin and Judge 2012). Satisfied employees prefer their job situation to dissatisfied employees (Ristiana, 2013). Commitment has an important role, especially in a person's performance at work, this is due to a commitment that becomes a reference and encouragement that makes them more responsible for their obligations (Brodoastuti, 2016). A strong commitment allows each employee to try to face the challenges and emphasize the existing ones. Success in facing these challenges will foster a sense of pride in the organization (Minarsih, 2012).

## **II. Literature Review**

### **2.1. Organizational Commitment**

Organizational commitment is an emotional bond between employees and the organization that arises because of trust, the willingness to achieve a goal and the desire to maintain membership as part of the organization and this is what makes employees stay in an organization in both pleasant and unhappy conditions. The strong commitment of employees to the company also determines the nature and behavior of these employees while in the company. Organizational commitment encourages employees to keep their jobs and show the results they should. Employees who have a high commitment to the company tend to show good quality, more totality in their work, and low turnover rates for the company (Akbar, 2017).

### **2.2. Compensation**

The definition of compensation according to Nawawi (2001: 315) is an award/reward for workers who have contributed to realizing their goals, through activities called work. According to Hasibuan (2005: 118) compensation is all income in the form of money, direct or indirect goods received by employees as compensation for services provided to the company. Sofyandi (2013: 159) argues that compensation is a form of cost that must be incurred by the company in the hope that the company will receive

compensation in the form of work performance from its employees of course, that the work performance provided by employees must be greater than the compensation issued by the company.

### **2.3. Job Satisfaction**

Satisfied employees prefer their job situation to dissatisfied employees (Ristiana, 2013). Job satisfaction by Locke (1976) is a positive emotion that is felt as a result of the recognition of the success of the work done (Baporikar, 2017). Job satisfaction is a key element in explaining behavior in organizations and is the element most often researched in human resource management (Culibrk et al. 2018) Job satisfaction can be assessed both globally, namely based on general working conditions or at the individual level, namely based on aspects of individual work itself, including job appreciation, communication, working conditions, promotion opportunities, job recognition, supervision and so on (Spector, 1997; quoted by Baporikar, 2017). The characteristics of achieving a person's job satisfaction can be seen based on the emotional condition of an employee based on the results of the job appraisal, affective closeness to the job at hand, and the employee's attitude towards their job (Kumari & Pandey, 2011; quoted by Frempong, Agbenyo, Darko, 2018).

### **2.4. Organizational Citizenship Behavior**

Organizational Citizenship Behavior (OCB) is defined as employee behavior that exceeds what is standardized (Darmawati, 2013). Good employees (good citizens) tend to display OCB in their work environment so that organizations will be better off with employees acting OCB. Organizational Citizenship Behavior can arise from various factors in the organization, including due to employee job satisfaction and high organizational commitment (Robbin and Judge, 2012). Organizational Citizenship Behavior is a positive behavior, in this case, the employee's behavior in helping other individual jobs as shown by someone in an organization or company (Nurhayati, Minarsi, and Wulan, 2016: 10). Organizational citizenship behavior (OCB) is considered as a behavior in the workplace that is following personal judgments that exceed a person's basic job requirements. OCB can also be described as behavior that exceeds task demand. Gibson, et al (2011) argue that organizational citizenship behavior is very important in organizational survival.

### **2.5. Employee Performance**

Employee performance is the result of work in quality and quantity achieved by an employee in carrying out his duties by the responsibilities assigned to him. Employee performance variables are measured using a Likert scale. Employee performance indicators are as follows: work quantity, work quality, time utilization, attendance, and cooperation (Mathis and Jackson, 2006: 78). Mangkunegara Performance (2009) "Employee performance as work performance or output, both in quality and quantity achieved by employees of the period association in carrying out their work duties

following the responsibilities assigned to them. The goal is to improve or improve organizational performance through improving the performance of the organization's HR. So, to anticipate the loss of orientation to a more meaningful life, HR uses noble values as a guide for professional life and individual performance. Employee Performance Appraisal according to Budihardjo (2014) is the main key, company development. There are two parties involved in the performance appraisal process, namely (company) and employees (HR), employee performance appraisal has a positive impact on both parties, becoming a professional in their field.

## 2.6. Hypothesis Development

Organizational commitment encourages employees to maintain their work and show the results they should. Employees who have a high commitment to the company tend to show good quality, more totality in their work, and low turnover rates for the company (Akbar, 2017). In previous research, Darmawati, A., & Indartono, S. (2015) showed that the application of organizational commitment has a positive and significant effect on the organizational OCB of Agent Jaya Hotel employees.

**H1: Commitment has a significant positive effect on organizational citizenship.**

The definition of compensation according to Nawawi (2001: 315) is an award/reward for workers who have contributed to realizing their goals, through activities called work. According to Hasibuan (2005: 118) compensation is all income in the form of money, direct or indirect goods received by employees in return for services provided to the company. In previous research by Octaviani, EN (2018) Compensation (X1) and Career Development (X2) ) has a significant effect on Organizational Citizenship Behavior.

**H2: competence has a significant positive effect on OCB.**

Satisfied employees prefer their job situation to dissatisfied employees (Ristiana, 2013). Latief, A., Syardiansah, S., & Safwan, M. (2019) organizational commitment and job satisfaction have a positive effect on the performance of the organizational commitment variables and employees of the City Health BPJS, job satisfaction affects Langsa's performance.

**H3: Job satisfaction has a significant positive effect on OCB**

Organizational Citizenship Behavior (OCB) is defined as employee behavior that exceeds what is standardized (Darmawati, 2013). Good employees (good citizens) tend to display OCB in their work environment so that organizations will be better off with employees acting OCB. Organizational Citizenship Behavior can arise from various factors in the organization, including due to employee job satisfaction and high organizational commitment (Robbin and Judge, 2012). In Suzana, A. (2017).

Organizational citizenship behavior with employee performance is at a very strong level which is indicated by the number 0.865 in a positive direction.

**H4: OCB has a significant positive effect on employee performance**

### III. Methodology

Based on this research, the population in this is all employees of the Bank BPD DIY Senopati branch office with a total of 100 employees. The sample in this study 52 employees who work at Bank BPD DIY, with an accidental sampling technique, using a questionnaire instrument. The method used is the Slovin method and the data analysis uses the single test.

### IV. Results and Discussion

#### 4.1. Validity and Reliability Test

The validity test results show the corrected item-total correlation value > from r-table (0.230) or valid. The variable data in this study has been tested and has a good reliability value with a significance level of 5% and Cronbach's alpha based on std. > 0.06.

#### 4.2. Classic Assumptions Test

Table 1 shows that the regression model following the Sobel test stages has met multicollinearity (VIF and tolerance), heteroscedasticity (Glejser test), and normality (Kolmogorov-Smirnov test).

**Table 1.** Classical Assumption Test

Mdl	Var.	Multikolinierity			glejser Test		Kolmogorov-Smirnov test	
		Free	Bound	Tol.	VIP	T	Sig.	Asymp. sig (2-tailed)
1	commitment	ocb	.919	1.088	1.613	.111	.097	.200
2	compensation	ocb	.922	1.085	-.621	.536	.097	.200
3	satisfaction	ocb	.988	1.012	1.964	.053	.097	.200
4	commitment	kk	.844	1.184	-1.112	.269	.068	.200
5	compensation	kk	.909	1.101	.415	.680	.068	.200
6	Satisfaction	kk	.985	1.015	-.477	.635	.068	.200
7	Ocb	kk	.917	1.091	.209	.835	.068	.200

The Kolmogorov-Smirnov Z test result of the first regression is 0.200 with Asymp. sig. (2-tailed) 0.097, the second Kolmogorov-Smirnov Z regression test is 0.200 with Asymp.sig. (2-tailed) 0.68, the results of the first regression Glajser test show the sig

value. Commitment (0.111), the value of sig. compensation (0.536), satisfaction test value (0.53), and the second regression glacier test shows the sig value. Commitment (0.269), compensation (0.680), satisfaction (0.635) and OCB (0.835) > 0.05 or not significant, which means there is no heteroscedasticity in the regression model. The multicollinearity test results show the tolerance value of the first regression of commitment (0.919), the multicollinearity test shows the tolerance value of competence (0.922), and satisfaction (0.988). Tolerance value from the regression of the two commitments (0.844), competence (0.909), job satisfaction (0.985) and OCB (0, 0.917) > 0.10 <10, which means there is no multicollinearity.

### 4.3. Hypothesis Test

The results of hypothesis testing in table 5 show that H1 is accepted with a probability value of 0.045, H2 is accepted with a probability value of 0.030, H3 is rejected with a probability value of 0.692 > 0.05. The test results H4, H5 are accepted with a probability value of 0.000 and H 6 is rejected with a probability of 0.350 > from 0.05, and H7 is accepted with a probability value of 0.043. Whereas H8 with the single-test test with a one-tailed probability value of 0.015 <0.05, so that the OCB variable affects a variable intervening commitment to employee performance. Hypothesis 9 with a one-tailed probability value of 0.005 <0.05, thus OCB can affect a compensation intervening variable on performance. and the last Hypothesis 10 with a one-tailed probability value of 0.219 > 0.05, then the OCB variable cannot affect an intervening variable of satisfaction on employee performance.

**Table 2.** Hypothesis Testing

	Var		Stand. Coeff.	t	Sig.	Koef. Determinat
	Free	Bound	Beta			
H1	Commitment	OCB	.297	2.062	.045	.226
H2	Competence	OCB	.110	2.115	.030	.226
H3	Satisfaction	OCB	.055	.398	.692	.226
H4	Commitment	KK	.437	3.854	.000	.445
H5	Competence	KK	.426	3.891	.000	.445
H6	Satisfaction	KK	.099	.944	.350	.445
H7	Ocb	KK	.360	2.330	.043	.445

Hypothesis testing 8, 9, and 10 used the Sobel test (Sobel, 1982). The results are as follows:

**Table 3.** Sobel Test

Variable	One- tailed probability	Sig < 0,05	Information
KO.OCB,KK	0,015	0,05	Accepted
KOM,OCB,KK	0,005	0,05	Accepted
KEP,OCB,KK	0.219	0,05	Rejected

### 4.3. Discussion

The first hypothesis testing shows that there is a positive and significant influence on organizational commitment to the OCB of PT Bank BPD DIY employees. The level of significance for the organizational commitment variable is 0.045 ( $p < 0.05$ ) and t count is 2.062 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1.664 < 2.062$ ) and the significance  $0.045 / 2 = 0.025 < 0.05$ , then hypothesis 1 is accepted. Respondents stated that I have a desire to become a reliable employee for a BPD bank (KO5) with an average of 4.35 higher than the other average with 23 respondents who answered strongly agree, 26 respondents answered agreed, and 1 respondent answered neutral, and 2 respondent answered disagree. The lowest answer is (KO1) I agree with the organization's goals with an average of 4.06 with 19 respondents answering strongly agree, 19 respondents answering agree, 4 respondents answering neutral, and 6 respondents answering disagreeing. So that the employees of Bank BPD DIY commit to the organization with the desire to become reliable employees in advancing the organization.

The second hypothesis testing shows that there is no significant effect of compensation on OCB with a significance level for the compensation variable of 0.030 ( $p < 0.05$ ) and t count of 2.115 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1.664 > 2.115$ ) and significance  $0.030 / 2 = 0.015 < 0.05$ , then hypothesis 2 is accepted. Compensation was assessed by respondents as follows: Bank BPD provides promotion guarantees for employees (KOM5) with an average of 3.98 higher than the other average with 12 respondents who answered strongly agree, 29 respondents answered agree, and 9 respondents answered neutral, and 2 respondent answered disagree. The lowest answer was (KS2) which stated that BPD Bank provided health insurance with an average of 2.88 with 6 respondents answering strongly agree, 9 respondents answered agreeing, 16 respondents, answered neutral, 15 respondents answered disagree, and 6 respondents answered strongly disagreed.

The third hypothesis testing shows that there is an insignificant influence. The level of significance for the job satisfaction variable is 0.692 ( $p > 0.05$ ) and t count is .398 (negative), it can be concluded that  $t_{table} > t_{count}$  ( $1.664 > .398$ ) and the significance  $0.692 / 2 = 0.346 > 0.05$ , then hypothesis 3 is rejected. Job satisfaction with employee

OCB. Job satisfaction in the respondent's value is as follows: Bank BPD DIY I am satisfied with the results of the work I have done so far (KEP4) with an average of 4.25 higher than the other average with 22 respondents answered very agree, 22 respondents, answered agree, 7 respondents answered neutral and 1 respondent answered disagree, the lowest answer was (KEP1) I was satisfied with the salary I received with an average of 3.62 with 7 respondents answered strongly agree, 21 respondents answered agreed, 22 respondents, answered neutral, 1 respondent answered disagree, and 1 respondent answered strongly disagree.

Testing the fourth hypothesis shows that there is a positive and significant effect of organizational commitment on employee performance. The level of significance for the organizational commitment variable is 0,000 ( $p < 0.05$ ) and t count is 3,834 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1,664 < 3,834$ ) and the significance  $0,000 / 2 = 0 < 0.05$ , then hypothesis 4 is accepted. Organizational commitment is an emotional bond between employees and the organization that arises because of trust, the willingness to achieve a goal and the desire to maintain membership as part of the organization and this is what makes employees stay in an organization in both pleasant and unhappy conditions. So that with the existence of commitment from employees will improve employee performance and will improve organizational performance for the better and increase the profitability of the organization.

The fifth hypothesis testing shows that there is a positive effect of compensation on the employee performance of PT BPD DIY. The level of significance for the compensation variable on employee performance is 0.000 ( $p < 0.05$ ) and t count is 3,891 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1,664 > 3,891$ ) and a significance of  $0,000 / 2 = 0.000 < 0.05$ , then hypothesis 5 is accepted. Compensation is a form of cost that must be incurred by the company in the hope that the company will receive rewards in the form of work performance from its employees (of course that the work performance provided by employees must be greater than the compensation issued by the company). The greater the compensation received by employees, the employees will feel happy with the company and employees will have a loyal nature to the company, so it is hoped that the compensation provided by the company for employees will further improve employee performance.

The sixth hypothesis testing shows that there is a negative and insignificant effect of job satisfaction on employee performance. The level of significance for the variable job satisfaction with performance is .350 ( $p > 0.05$ ) and t count is .944 (negative), it can be concluded that  $t_{table} > t_{count}$  ( $1.664 > .944$ ) and the significance of  $0.350 / 2 = < 0.175$ , then hypothesis 6 is rejected. Job satisfaction can be assessed both globally, namely based on working conditions in general or at the individual level, namely based on aspects of the individual's work itself, including job appreciation, communication, working conditions, promotion opportunities, job recognition, supervision, and so on. So that job satisfaction needs to be noticed by a BPD DIY Bank management to further

improve employee job satisfaction, such as giving appreciation to employees, so that employees will feel themselves being noticed by their superiors so that employees will have the intention to improve their performance.

The seventh hypothesis testing shows that there is a significant effect of OCB on employee performance. The level of significance for the variable organizational citizenship behavior towards performance is 0.043 ( $p < 0.05$ ) and t count is 2.330 (positive), it can be concluded that  $t_{table} < t_{count}$  ( $1.664 > 2.330$ ) and significance  $0.043 / 2 = 0.021 < 0.05$ , then hypothesis 7 is accepted. Organizational Citizenship Behavior is a positive behavior, in this case, the employee's behavior in helping other individual work is shown by someone in an organization or company, the loyalty behavior that employees have is already at a good level, proven by the employees of BPD DIY bank that are satisfied with compensation provided by the organization so that it is necessary to increase continuous encouragement so that it is even better in maintaining employee loyalty of BANK BPD DIY, the more loyal employees to the organization it will improve organizational performance and will increase the profitability of the organization.

Testing the eighth hypothesis shows that there is a positive and significant effect of organizational commitment on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. Thus OCB can mediate organizational commitment to employee performance as evidenced by data processing using Sobel Tests with a one-tailed probability value of 0.000  $<$  from 0.05 so it can be concluded that OCB can mediate Organizational Commitment to Employee Performance.

The ninth hypothesis testing shows that there is a positive and significant effect of compensation on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. Thus OCB can mediate compensation to employee performance as evidenced by data processing using Sobel Tests with a one-tailed probability value of 0.005  $<$  from 0.05 so that it can be concluded that OCB can mediate compensation to employee performance.

The tenth hypothesis testing shows that there is an insignificant influence on job satisfaction on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. Thus OCB cannot mediate job satisfaction on employee performance as evidenced by data processing using Sobel Tests with a one-tailed probability value of 0.209  $>$  from 0.05 so it can be concluded that OCB cannot mediate job satisfaction on employee performance.

## V. Conclusion and Recommendation

### 5.1. Conclusion

Based on the results of the analysis discussed in the previous chapter, the following conclusions can be drawn: There is a positive and significant influence. Organizational commitment to OCB for employees of PT Bank BPD DIY. There is a significant positive effect of Compensation on OCB for employees of PT Bank BPD DIY. Which is not significant Job satisfaction on OCB for employees of PT Bank BPD DIY. There is a significant positive effect of Organizational Commitment on employee performance of employees of PT Bank BPD DIY. There is a significant positive effect of Compensation on employee performance of employees of PT Bank BPD DIY. There is a significant influence of negative insignificant Job satisfaction on employee performance of PT Bank BPD DIY there is a positive and significant effect of OCB on employee performance with employees of PT Bank BPD DIY. There is a positive and significant effect of organizational commitment on employee performance with OCB as an intervening variable for employees of PT bank BPD DIY. There is a positive and significant effect of compensation on employee performance with OCB as an intervening variable for employees of PT Bank BPD DIY. There is no significant effect of job satisfaction on employee performance with OB as an intervening variable for employees of PT Bank BPD DIY.

### 5.2. Recommendation

This research should be more varied so that it can be developed on variables that are thought to have a deeper influence and apply previous results such as job satisfaction with OCB through motivation as an intervening variable. For BPD DIY Bank Management, Employees in various Sector Units to increase their commitment to themselves to improve the organization to continue to maintain its existence. For BPD DIY Bank employees, they should show the behavior of helping others voluntarily which is not their duty and obligation (Courtesy). Voluntary behavior to increase work creatively so that the organization can increase and exceed the expected targets (Conscientiousness).

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## Human Resources Competency In Improving Employee Performance

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### Abstract

Each company is formed to achieve a specific goal and it is said to be successful when it has been achieved is necessary to achieve success incompetent human resources. There are competence becomes very useful to help organizations to improve their performance. This research aims to specify the influence of knowledge competence, skills, and attitudes on employee performance at PT. Nikomas Gemilang. The Data were collected using the method of survey, interviews, a questionnaire with 100 respondents. The data were analyzed using quantitative descriptive analysis and Partial least square structural equation modeling (PLS-SEM). The analyzed model of the equation is the outer model, the inner model, and the hypothesis testing. Based on the results of the calculations using software SmartPLS version 3.3.2 for Windows has a significant influence on the employee's performance with the value of 2.545 significance of 0.011, the value of significance is less than 0.05. Knowledge has no significant effect on the employee's performance with a value of 1.705 in its significance of 0.089 more than 0.05. Attitudes have a significant influence on the performance of employees with the statistical value of 3.313 significance value 0.001, a significant value is less than 0.05. Conclusion Skills and attitudes have a positive influence on employee performance and knowledge does not influence employee performance.

**Keywords:** competence, knowledge, skills, attitude and employee performance.

**JEL Classification:** M10, M20.

**Type of paper:** Research Paper.

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## **I. Introduction**

The company will develop and be able to survive in a competitive environment if it is supported by employees who are competent in their fields. Employee competencies consisting of knowledge, abilities/skills, attitudes are adjusted to the field of work required by the organization, to produce outstanding employee performance (Hidayat & Saleh, 2020). Thus, competence shows skills and knowledge characterized by professionalism in a particular field as the most important thing (Garthe & Hasselhorn, 2021).

In a corporate environment, the work attitude, knowledge, and skills of each employee are also absolutely valuable assets for the company (Karlsson, Sandqvist, Seing, & Ståhl, 2021). Work attitude reflects a tendency to respond to something consistently. In this case, employees tend to consistently obey company rules and can carry themselves out in completing what is ordered or assigned (Silva, Achcar, & Hermosilla, 2021). In carrying out the company's activities, it is required to be more professional and able to compete globally. For this reason, the company PT. Nikomas Gemilang needs human resources who have sufficient competence, but the problem is, the competence in this company is that employees lack skills in operating programs on computers, some employees often delegate work assignments to other employees who are more skilled so that it took a long time to get the job done. Communication or interaction problems trigger employees to understand the meaning of the tasks assigned to employees, thus making employees misinformed about assignments, it also takes a long time to complete tasks.

PT. Nikomas Gemilang requires the principles of management science to encourage the effectiveness of organizational performance and company progress. The system that forms knowledge management in this company in practice allows employees to learn from internal and external aspects of the company. Companies must pay attention to human resource management and systems so that skills and work attitudes at PT. Nikomas Gemilang is more practiced optimally and the performance of employees and organizations is more effective and shows that management knowledge is very much needed and can be utilized at PT. Nikomas Gemilang so that organizational performance can develop.

## **II. Literature Review**

### **2.1. Background Theory**

Competence is an individual's ability to carry out a job properly and has advantages based on matters relating to knowledge, skills, and attitudes. The Knowledge dimension has the meaning of a boundary that isolates the existence of any existence. Meanwhile, indicators are variables that can be used to evaluate the situation or the possibility of measuring the changes that occur from time to time. The dimensions used in this study adapt the theory expressed by Yuniarsih and Suwatno (2008) which

are divided into dimensions and indicators as follows: Educational Dimensions, The Experience Dimension, and Dimensions of Interest.

The dimensions of skills used in this study adapt the theory put forward by Yuniarsih and Suwatno (2008), which are divided into dimensions and indicators as follows: Dimensions of proficiency, Personality dimensions, and Dimensions of exercise.

Furthermore, Krech and Crutchfield (Sears, Freedman, Peplau, 1985) say there are three dimensions of attitude: Cognitive consists of all the cognitions that a person has regarding the object of certain attitudes, facts, knowledge, and beliefs about objects; Affective consists of all feelings or emotions of a person towards objects, especially judgments; and Conative (behavior), consisting of a person's readiness to react or the tendency to act on objects.

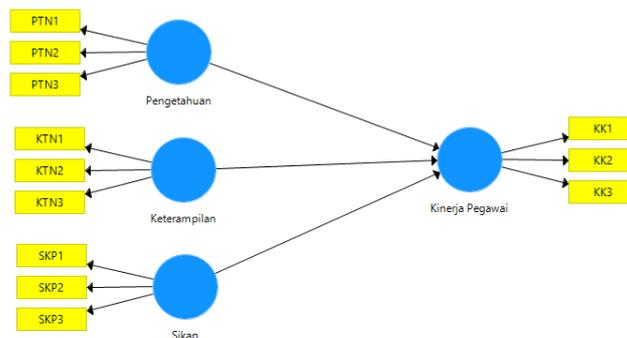
### III. Methodology

In this research, the method used is descriptive quantitative research. The population in this study were employees of the ADCI Adidas PT. Nikomas Gemilang as many as 125 employees. The sample used was 100 respondents. The power collection technique used in this study was a survey approach by distributing questionnaires to respondents with a choice of 1-5 point Likert scale. The data analysis technique used is the Partial Least Square (PLS) model.

### IV. Results and Discussion

#### 4.1. Results

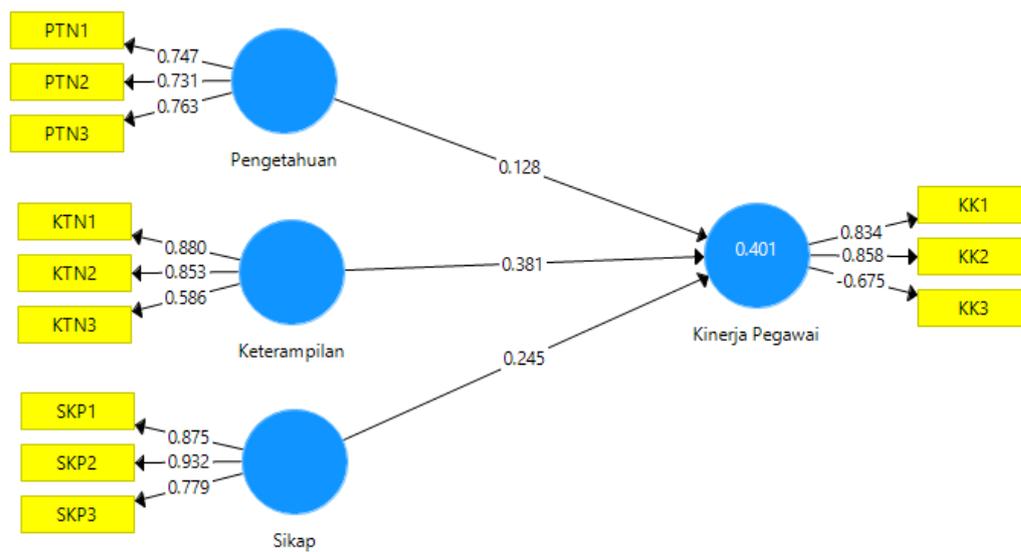
The evaluation of the model used in this study was carried out by evaluating the Outer Model and Inner Model. The Outer Model is a measurement model to assess the validity and reliability of the model, while the Inner Model is a structural model to predict the causality relationship between latent variables. The following is a structural model designed based on the variables and indicators used in this study.



**Figure 1. Structural Model**

Source : SmartPLS, (2020)

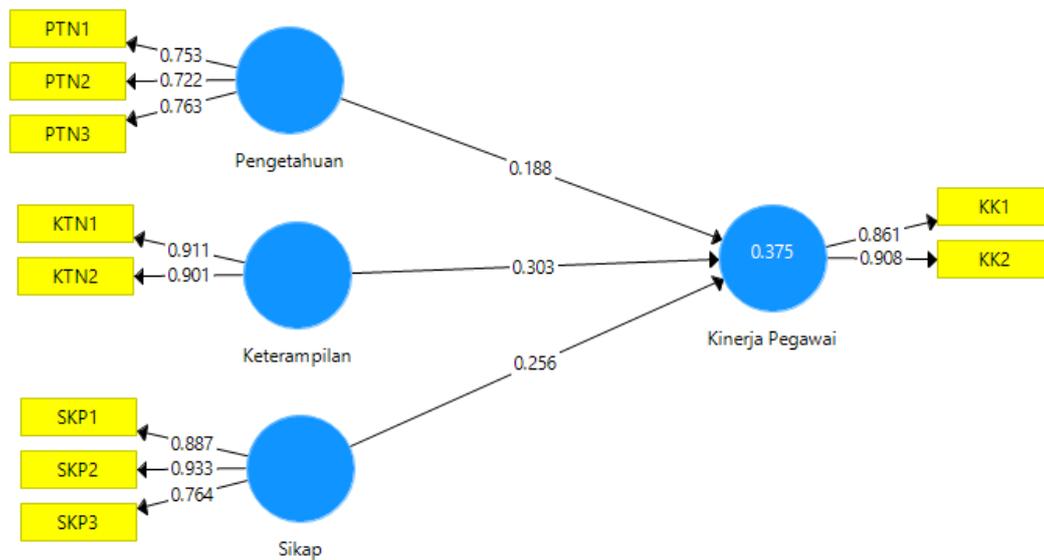
Outer Model is a model that specifies the relationship between the latent / construct variables with its indicators or it can be said that the outer model defines how each indicator relates to its latent / construct variables. The outer model is interpreted by looking at several things, including convergent validity, discriminant validity, composite reliability, Average Variance Extracted (AVE), and Cronbach's alpha. The PLS Algorithm model is presented in the following figure:



**Figure 2. PLS Algorithm Model**  
 Source: SmartPLS, (2020)

The picture above shows that the Employee Performance Constructure with 3 indicators, the loading value of KK1 is 0.834, KK2 is 0.858, KK3 is 0.675. Skills construct with 3 indicators has a loading value on the KTN1 indicator of 0.880, KTN2 0.853, KTN3 0.586. Knowledge Contract with 3 indicators has a loading value on the PTN1 indicator of 0.747, PTN2 of 0.731, PTN3 of 0.763. The Attitude construct with 3 indicators has a loading value on the SKP1 indicator of 0.875, SKP2 of 0.932, SKP3 of 0.779. Of all the indicators mentioned above, there is a loading value that has a loading value below 0.7, namely the KK3 indicator -0.675 and KTN3 0.586 so that these indicators must be removed from the construct.

After the KK3 and KTN3 indicators are removed from the model, the PLS Algorithm model must be recalculated. The results of the second calculation are as follows:



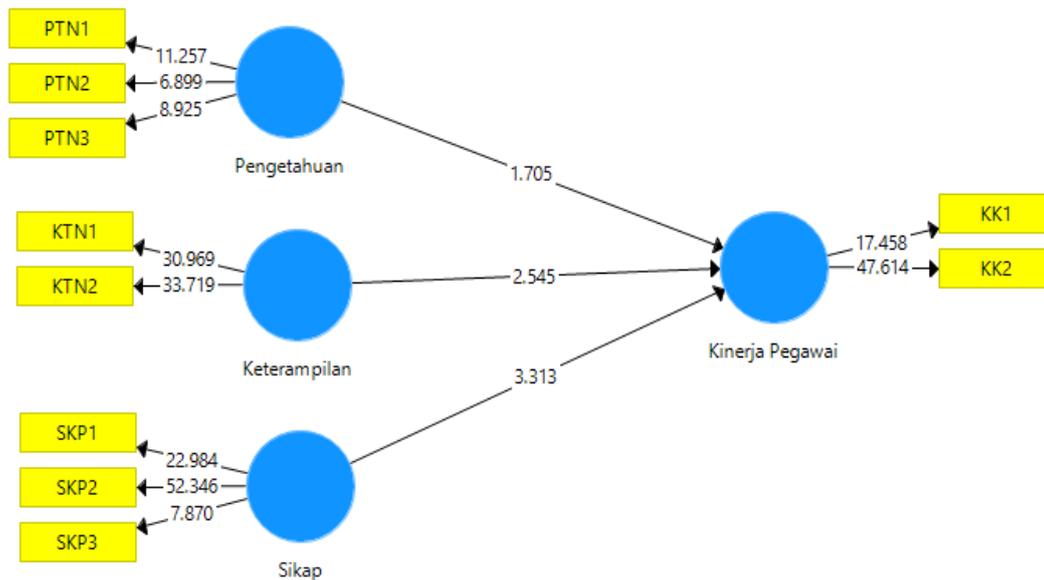
**Figure 3.** Second PLS Algorithm Model  
 Source: SmartPLS, (2020)

**Table 1.** Composite reliability, Average Variance Extracted (AVE), Cronbach's Alpha

Variable	Composite Reliability	Average Variance Extracted	Cronbach's Alpha
Skill ( <i>Keterampilan</i> )	0,902	0,821	0,782
Employee Performance ( <i>Kinerja Pegawai</i> )	0,878	0,783	0,726
Knowledge ( <i>Pengetahuan</i> )	0,790	0,557	0,614
Attitude ( <i>Sikap</i> )	0,898	0,747	0,829

Source : SmartPLS, (2020)

Evaluation of the Structural Model in PLS is evaluated through a bootstrapping procedure. From the results of the analysis of the bootstrapping procedure, the R-squares value for each latent variable is used as the predictive strength of the structural model and the Path Coefficient to see the results of the significance of the influence of the variables in this study. Changes in the value of R-squares can be used to explain the effect of latent/free variables on endogenous/bound latent variables whether they have a substantive effect, while the T-statistic value on the Path Coefficient is to determine the results of research on the hypothesis proposed in this study. Following are the results of the bootstrapping test using an image display as below:



**Figure 4. Bootstrapping**  
 Source: SmartPLS, (2020)

The results of the Bootstrapping analysis results in Figure 4.4 above show that there are several values in the path coefficient less than 1.96 which indicates that the significance of the influence relationship is still weak. Furthermore, to be more complete about Bootstrapping analysis besides in the form of the image model above, the measurement model output is also presented in the form of a report for a more detailed output as shown in the table below:

**Table 2. Path Coefficient**

Coefficient	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Skill ( <i>Keterampilan</i> ) -> Employee Performance ( <i>Kinerja Pegawai</i> )	0.303	0.280	0.119	2.545	0.011
Knowledge ( <i>Pengetahuan</i> )-> Employee Performance ( <i>Kinerja Pegawai</i> )	0.188	0.213	0.110	1.705	0.089
Sikap ( <i>Attitude</i> )-> Employee Performance ( <i>Kinerja Pegawai</i> )	0.256	0.267	0.077	3.313	0.001

Source: SmartPLS, (2020)

Furthermore, the Goodness of fit model is measured using R-square. The results of the R-squares for this study are presented in the following table:

**Table 3.** *R-squares*

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Kinerja Pegawai</b>	0.375	0.356

*Source : SmartPLS, (2020)*

From the results of SEM-PLS processing, it can be seen that the R-square value for the Performance variable is 0.375 which means that the magnitude of the influence of knowledge, skills, and attitudes on performance is 37.5% so it can be interpreted that the performance variables that can be explained by the variables of knowledge, skills, and attitudes are equal to 37.5% while 62.5% was explained by other variables outside those studied.

## 4.2. Discussion

In this study, knowledge is proven to not affect employee performance. Where there are factors in employees who do not have a strong desire to have more knowledge, which causes a lack of knowledge in work, the type of work that is densely employees becomes one thing where employees have no desire to increase their level of knowledge. The results of this study are not in line with research conducted by Natasha Calistha (2016). To increase employee knowledge, education and training can be pursued. To increase the ability of employees to carry out a job so that later they can become a source of professional personnel. The higher the knowledge, the higher the employee's performance. This confirms Spencer's view in Moeheriono (2014).

In this study, skills proved to have a significant effect on employee performance. Where often employees attend pieces of training so that they will improve employee performance. This is under the research findings of Wibowo (2007) which explains that a person's job competence is a dimension of behavior that is behind the competent performance. The statement describes competence as the driving force of performance and determinants of the high and low quality of a performance, as well as the good and bad performance of the implementation of certain activities. The same results were also obtained by Muslimah (2016); Kristina Sri Utami (2018).

In this study, attitudes are proven to have a significant effect on employee performance. Competence will affect employee attitudes in acting and acting. The results of this study are relevant to the results of research conducted by Novia, Sudarwati, Ida (2018) showing that the variables attitude, knowledge, and skills have a significant effect on performance. Behavior is a function of the interaction between an individual and their environment. This means that the better the employee's attitude, the better the employee's performance is expected.

## V. Conclusion and Recommendation

### 5.1. Conclusion

Knowledge is not proven to have a positive and significant effect on employee performance. Skills have a positive and significant effect on employee performance. Attitude has a positive and significant effect on employee performance. The results of this study are expected to be used as a reference for other researchers to develop and correct and make improvements as necessary. Referring to the results of the research, the authors provide suggestions, namely that the company is expected to integrate various training programs to improve employee competence and performance so that company goals can be achieved, the company is also expected to be more careful in placing employees in tasks and jobs that are under the character and abilities they have. Personally, the Company can also make these three competencies a part of the employee recruitment process.

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## Human Resources Competency In Improving Employee Performance

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### Abstract

Each company is formed to achieve a specific goal and it is said to be successful when it has been achieved is necessary to achieve success incompetent human resources. There are competence becomes very useful to help organizations to improve their performance. This research aims to specify the influence of knowledge competence, skills, and attitudes on employee performance at PT. Nikomas Gemilang. The Data were collected using the method of survey, interviews, a questionnaire with 100 respondents. The data were analyzed using quantitative descriptive analysis and Partial least square structural equation modeling (PLS-SEM). The analyzed model of the equation is the outer model, the inner model, and the hypothesis testing. Based on the results of the calculations using software SmartPLS version 3.3.2 for Windows has a significant influence on the employee's performance with the value of 2.545 significance of 0.011, the value of significance is less than 0.05. Knowledge has no significant effect on the employee's performance with a value of 1.705 in its significance of 0.089 more than 0.05. Attitudes have a significant influence on the performance of employees with the statistical value of 3.313 significance value 0.001, a significant value is less than 0.05. Conclusion Skills and attitudes have a positive influence on employee performance and knowledge does not influence employee performance.

**Keywords:** competence, knowledge, skills, attitude and employee performance.

**JEL Classification:** M10, M20.

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## **I. Introduction**

The company will develop and be able to survive in a competitive environment if it is supported by employees who are competent in their fields. Employee competencies consisting of knowledge, abilities/skills, attitudes are adjusted to the field of work required by the organization, to produce outstanding employee performance (Hidayat & Saleh, 2020). Thus, competence shows skills and knowledge characterized by professionalism in a particular field as the most important thing (Garthe & Hasselhorn, 2021).

In a corporate environment, the work attitude, knowledge, and skills of each employee are also absolutely valuable assets for the company (Karlsson, Sandqvist, Seing, & Ståhl, 2021). Work attitude reflects a tendency to respond to something consistently. In this case, employees tend to consistently obey company rules and can carry themselves out in completing what is ordered or assigned (Silva, Achcar, & Hermosilla, 2021). In carrying out the company's activities, it is required to be more professional and able to compete globally. For this reason, the company PT. Nikomas Gemilang needs human resources who have sufficient competence, but the problem is, the competence in this company is that employees lack skills in operating programs on computers, some employees often delegate work assignments to other employees who are more skilled so that it took a long time to get the job done. Communication or interaction problems trigger employees to understand the meaning of the tasks assigned to employees, thus making employees misinformed about assignments, it also takes a long time to complete tasks.

PT. Nikomas Gemilang requires the principles of management science to encourage the effectiveness of organizational performance and company progress. The system that forms knowledge management in this company in practice allows employees to learn from internal and external aspects of the company. Companies must pay attention to human resource management and systems so that skills and work attitudes at PT. Nikomas Gemilang is more practiced optimally and the performance of employees and organizations is more effective and shows that management knowledge is very much needed and can be utilized at PT. Nikomas Gemilang so that organizational performance can develop.

## **II. Literature Review**

### **2.1. Background Theory**

Competence is an individual's ability to carry out a job properly and has advantages based on matters relating to knowledge, skills, and attitudes. The Knowledge dimension has the meaning of a boundary that isolates the existence of any existence. Meanwhile, indicators are variables that can be used to evaluate the situation or the possibility of measuring the changes that occur from time to time. The dimensions used in this study adapt the theory expressed by Yuniarsih and Suwatno (2008) which

are divided into dimensions and indicators as follows: Educational Dimensions, The Experience Dimension, and Dimensions of Interest.

The dimensions of skills used in this study adapt the theory put forward by Yuniarsih and Suwatno (2008), which are divided into dimensions and indicators as follows: Dimensions of proficiency, Personality dimensions, and Dimensions of exercise.

Furthermore, Krech and Crutchfield (Sears, Freedman, Peplau, 1985) say there are three dimensions of attitude: Cognitive consists of all the cognitions that a person has regarding the object of certain attitudes, facts, knowledge, and beliefs about objects; Affective consists of all feelings or emotions of a person towards objects, especially judgments; and Conative (behavior), consisting of a person's readiness to react or the tendency to act on objects.

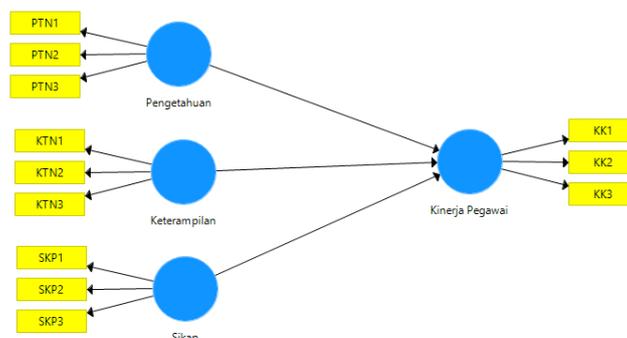
### III. Methodology

In this research, the method used is descriptive quantitative research. The population in this study were employees of the ADCI Adidas PT. Nikomas Gemilang as many as 125 employees. The sample used was 100 respondents. The power collection technique used in this study was a survey approach by distributing questionnaires to respondents with a choice of 1-5 point Likert scale. The data analysis technique used is the Partial Least Square (PLS) model.

### IV. Results and Discussion

#### 4.1. Results

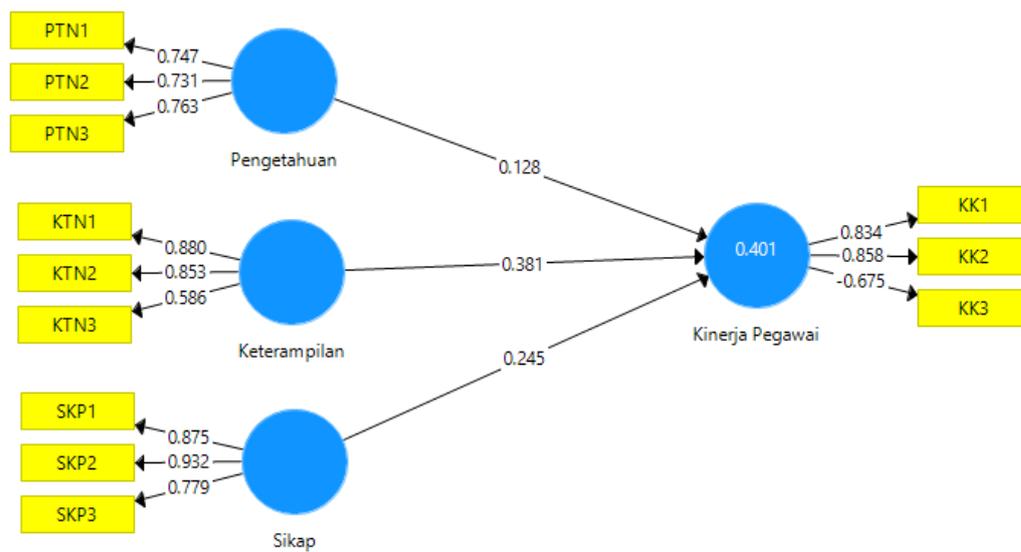
The evaluation of the model used in this study was carried out by evaluating the Outer Model and Inner Model. The Outer Model is a measurement model to assess the validity and reliability of the model, while the Inner Model is a structural model to predict the causality relationship between latent variables. The following is a structural model designed based on the variables and indicators used in this study.



**Figure 1. Structural Model**

Source : SmartPLS, (2020)

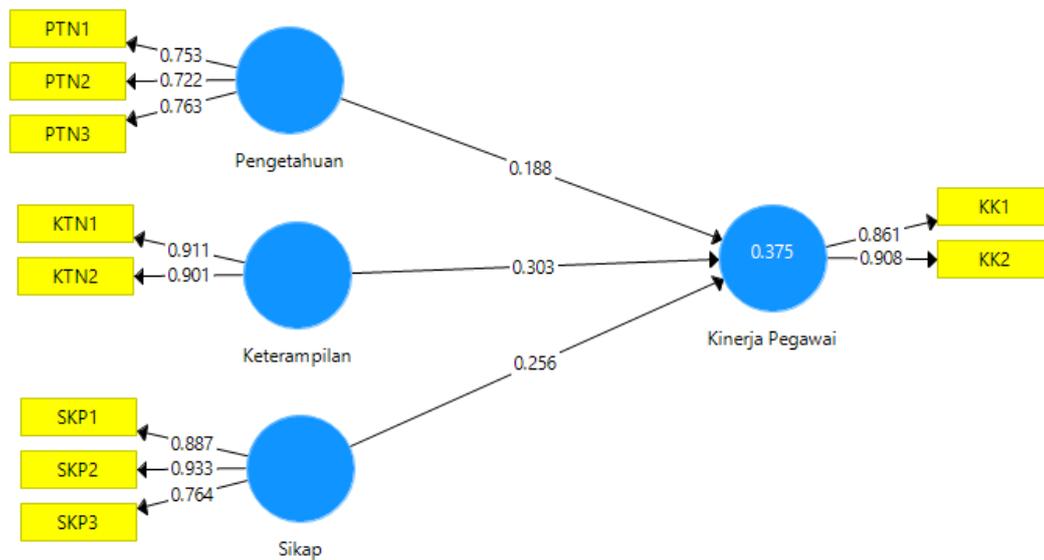
Outer Model is a model that specifies the relationship between the latent / construct variables with its indicators or it can be said that the outer model defines how each indicator relates to its latent / construct variables. The outer model is interpreted by looking at several things, including convergent validity, discriminant validity, composite reliability, Average Variance Extracted (AVE), and Cronbach's alpha. The PLS Algorithm model is presented in the following figure:



**Figure 2. PLS Algorithm Model**  
 Source: SmartPLS, (2020)

The picture above shows that the Employee Performance Constructure with 3 indicators, the loading value of KK1 is 0.834, KK2 is 0.858, KK3 is 0.675. Skills construct with 3 indicators has a loading value on the KTN1 indicator of 0.880, KTN2 0.853, KTN3 0.586. Knowledge Contract with 3 indicators has a loading value on the PTN1 indicator of 0.747, PTN2 of 0.731, PTN3 of 0.763. The Attitude construct with 3 indicators has a loading value on the SKP1 indicator of 0.875, SKP2 of 0.932, SKP3 of 0.779. Of all the indicators mentioned above, there is a loading value that has a loading value below 0.7, namely the KK3 indicator -0.675 and KTN3 0.586 so that these indicators must be removed from the construct.

After the KK3 and KTN3 indicators are removed from the model, the PLS Algorithm model must be recalculated. The results of the second calculation are as follows:



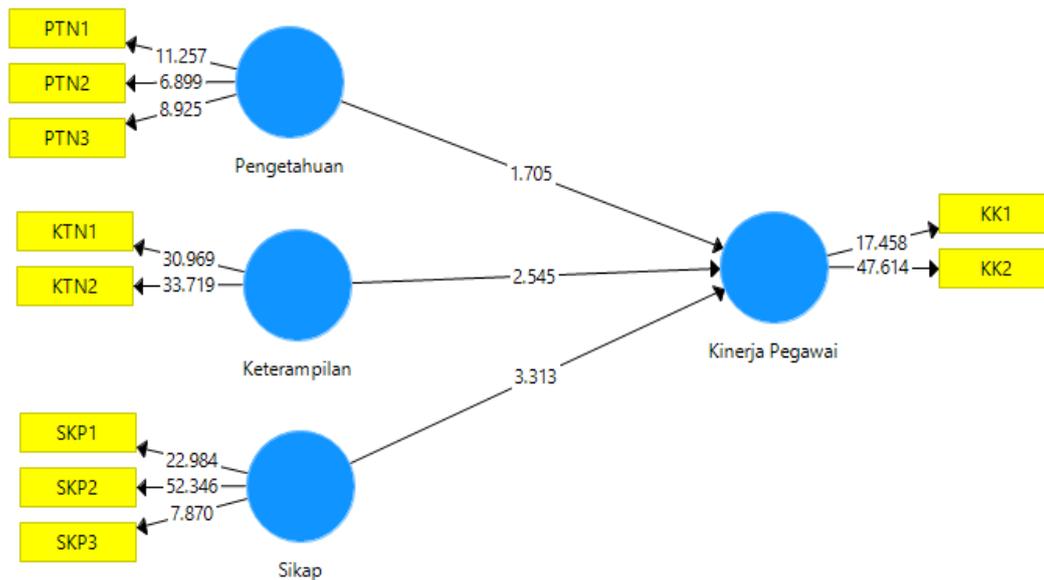
**Figure 3.** Second PLS Algorithm Model  
 Source: SmartPLS, (2020)

**Table 1.** Composite reliability, Average Variance Extracted (AVE), Cronbach's Alpha

Variable	Composite Reliability	Average Variance Extracted	Cronbach's Alpha
Skill ( <i>Keterampilan</i> )	0,902	0,821	0,782
Employee Performance ( <i>Kinerja Pegawai</i> )	0,878	0,783	0,726
Knowledge ( <i>Pengetahuan</i> )	0,790	0,557	0,614
Attitude ( <i>Sikap</i> )	0,898	0,747	0,829

Source : SmartPLS, (2020)

Evaluation of the Structural Model in PLS is evaluated through a bootstrapping procedure. From the results of the analysis of the bootstrapping procedure, the R-squares value for each latent variable is used as the predictive strength of the structural model and the Path Coefficient to see the results of the significance of the influence of the variables in this study. Changes in the value of R-squares can be used to explain the effect of latent/free variables on endogenous/bound latent variables whether they have a substantive effect, while the T-statistic value on the Path Coefficient is to determine the results of research on the hypothesis proposed in this study. Following are the results of the bootstrapping test using an image display as below:



**Figure 4. Bootstrapping**  
 Source: SmartPLS, (2020)

The results of the Bootstrapping analysis results in Figure 4.4 above show that there are several values in the path coefficient less than 1.96 which indicates that the significance of the influence relationship is still weak. Furthermore, to be more complete about Bootstrapping analysis besides in the form of the image model above, the measurement model output is also presented in the form of a report for a more detailed output as shown in the table below:

**Table 2. Path Coefficient**

Coefficient	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Skill ( <i>Keterampilan</i> ) -> Employee Performance ( <i>Kinerja Pegawai</i> )	0.303	0.280	0.119	2.545	0.011
Knowledge ( <i>Pengetahuan</i> )-> Employee Performance ( <i>Kinerja Pegawai</i> )	0.188	0.213	0.110	1.705	0.089
Sikap ( <i>Attitude</i> )-> Employee Performance ( <i>Kinerja Pegawai</i> )	0.256	0.267	0.077	3.313	0.001

Source: SmartPLS, (2020)

Furthermore, the Goodness of fit model is measured using R-square. The results of the R-squares for this study are presented in the following table:

**Table 3.** *R-squares*

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Kinerja Pegawai</b>	0.375	0.356

*Source : SmartPLS, (2020)*

From the results of SEM-PLS processing, it can be seen that the R-square value for the Performance variable is 0.375 which means that the magnitude of the influence of knowledge, skills, and attitudes on performance is 37.5% so it can be interpreted that the performance variables that can be explained by the variables of knowledge, skills, and attitudes are equal to 37.5% while 62.5% was explained by other variables outside those studied.

## 4.2. Discussion

In this study, knowledge is proven to not affect employee performance. Where there are factors in employees who do not have a strong desire to have more knowledge, which causes a lack of knowledge in work, the type of work that is densely employees becomes one thing where employees have no desire to increase their level of knowledge. The results of this study are not in line with research conducted by Natasha Calistha (2016). To increase employee knowledge, education and training can be pursued. To increase the ability of employees to carry out a job so that later they can become a source of professional personnel. The higher the knowledge, the higher the employee's performance. This confirms Spencer's view in Moeheriono (2014).

In this study, skills proved to have a significant effect on employee performance. Where often employees attend pieces of training so that they will improve employee performance. This is under the research findings of Wibowo (2007) which explains that a person's job competence is a dimension of behavior that is behind the competent performance. The statement describes competence as the driving force of performance and determinants of the high and low quality of a performance, as well as the good and bad performance of the implementation of certain activities. The same results were also obtained by Muslimah (2016); Kristina Sri Utami (2018).

In this study, attitudes are proven to have a significant effect on employee performance. Competence will affect employee attitudes in acting and acting. The results of this study are relevant to the results of research conducted by Novia, Sudarwati, Ida (2018) showing that the variables attitude, knowledge, and skills have a significant effect on performance. Behavior is a function of the interaction between an individual and their environment. This means that the better the employee's attitude, the better the employee's performance is expected.

## V. Conclusion and Recommendation

### 5.1. Conclusion

Knowledge is not proven to have a positive and significant effect on employee performance. Skills have a positive and significant effect on employee performance. Attitude has a positive and significant effect on employee performance. The results of this study are expected to be used as a reference for other researchers to develop and correct and make improvements as necessary. Referring to the results of the research, the authors provide suggestions, namely that the company is expected to integrate various training programs to improve employee competence and performance so that company goals can be achieved, the company is also expected to be more careful in placing employees in tasks and jobs that are under the character and abilities they have. Personally, the Company can also make these three competencies a part of the employee recruitment process.

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Yuniarsih, T., & Suwatno. (2008). *Manajemen Sumber Daya Manusia*. Bandung: CV. Alfabeta.

## Profitability Ratio Analysis at PT. Medikaloka Hermina, TBK.

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### Abstract

This study aims to determine the company's financial performance by using profitability ratio analysis, where the profitability ratio is a ratio that aims to determine the company's ability in generating profit over a certain period and also provides an overview of the level of management effectiveness in carrying out its operations. Profitability ratio consists of three ratios, among others Return On Assets, Return On Equity and Net Profit Margin. The research object is PT Medikaloka Hermina Tbk, where the health services company has done IPO (Initial Public Offering) or initial public offering so that economic growth of company very rapidly. The purpose of this study is to test and analyze the financial performance of the company at PT. Medikaloka Hermina Tbk. year 2018 - 2020 if reviewed from the profitability ratio. The sample of this research is financial reports from PT Medikaloka Hermina Tbk for 2018 - 2020 published on the Indonesia Stock Exchange website.

**Keywords:** Company Profitability, Initial Public Offering

**JEL Classification :** M21

**Type of paper:** Research Paper

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## I. Introduction

The growth of the health industry in the world is growing rapidly where the world community is increasingly concerned about their health (Tan & Juan, 2019), various hospitals have started competing to provide the best service for their patients, one of which is PT Medikaloka Hermina Tbk. The company operates a sizeable network of private hospitals in Indonesia. Initial Public Offering (IPO), which is known as a gateway for companies to obtain as much investment funds as possible from investors to increase their business capital, so that with many investors participating in providing capital assistance, companies can expand their business wings.

Medikaloka Hermina Tbk (HEAL) was established on May 7, 1999 and started commercial operations in 1985. Based on the Company's Articles of Association, the scope of activities of HEAL is doing business in the field of health services. Medikaloka Hermina Tbk operates 28 multi-specialty general hospitals with a total of 2,780 beds, which provide a range of specialist medical services, including maternal and child health services, complex surgical procedures, laboratory services, radiology and imaging facilities, fertility treatments and general health services. , pharmacies, diagnostic and emergency services. (Red : <http://britama.com/index.php/2018/07/sejarah-dan-profil-singkat-heal>)

On May 4, 2018, HEAL obtained an effective statement from the Financial Services Authority (OJK) to conduct an Initial Public Offering of HEAL Shares (IPO) to the public of 351,380,800 shares with a nominal value of Rp100, - per share with an offering price of Rp3,700. per share. These shares were listed on the Indonesia Stock Exchange (IDX) on May 16, 2018. (Red: <http://britama.com/index.php/2018/07/sejarah-dan-profil-sendek-heal>)

The large growth in the number of hospitals under PT Medikaloka Hermina Tbk has generated interest for researchers to discuss how the growth in financial performance is seen from its profitability ratio, because the profitability ratio represents the company's success (Husain et al., 2020) and how it contributes to the progress of PT Medikaloka Hermina Tbk after conducting the IPO, considering that the IPO contributed to increasing the company's business capital (Honjo, 2020). In connection with this, the authors set the title in this study, namely "Profitability Ratio Analysis at PT Medikaloka Hermina Tbk". The purpose of this research is to analyze the company's financial performance at PT Medikaloka Hermina Tbk in 2018 - 2020 in terms of profitability ratios.

## II. Literature Review

### 2.1. Net Profit Margin (NPM)

Net profit margin is the ratio of net profits to revenues for a company or business segment . Typically expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit. The equation to calculate net profit margin is:  $\text{net margin} = \text{net profit} / \text{revenue}$ . BREAKING DOWN 'Net Profit Margin' Net margins vary from company to company, and certain ranges can be expected in certain industries, as similar business constraints exist in each

distinct industry. Low profit margins don't necessarily equate to low profits (CHRIS B Murphy, 2019).

## 2.2. Return On Equity (ROE)

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. {ROE} is expressed as a percentage and calculated as: Return on Equity = Net Income/Shareholder's Equity Net income is for the full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock.) Shareholder's equity does not include preferred shares (Hargrave, 2019).

## 2.3. Return On Assets (ROA)

Definition of Return On Assets (ROA) on Investopedia - An indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to (Investopedia, 2016).

## III. Methodology

The sample in this study was PT Medikaloka Hermina Tbk in 2018 - 2020. The data collection method used in this study was the documentation study method. Documentation is one of the quantitative data collection methods (Joye, 2005) obtained through the Indonesian Capital Market Dictionary (ICMD) which is the financial statement information of companies listed on the Indonesia Stock Exchange, with specialization in financial reports at PT Medikaloka Hermina Tbk.

The data analysis method used is descriptive quantitative (Cartier et al., 2006), which is an analysis based on the calculation of ratios to determine the level of profitability used as a basis for decision making (Cartier et al., 2006). Data in the form of financial reports are analyzed using financial ratios needed to be able to obtain information about profitability consisting of Return On Asset Ratio (ROA) (Gallo, 2016), Return On Equity Ratio (ROE) (Pointer & Khoi, 2019), Net Profit Margin Ratio (NPM) (CHRIS B Murphy, 2019) to assess company performance. This profitability ratio is calculated by:

$$\text{Net Profit Margin} = \frac{\text{ProfitAfterTax}}{\text{Income}} \times 100 \%$$

$$\text{Return on Equity} = \frac{\text{ProfitAfterTax}}{\text{Equity}} \times 100 \%$$

$$\text{Return on Asset} = \frac{\text{ProfitAfterTax}}{\text{TotalAsset}} \times 100 \%$$

## IV. Results and Discussion

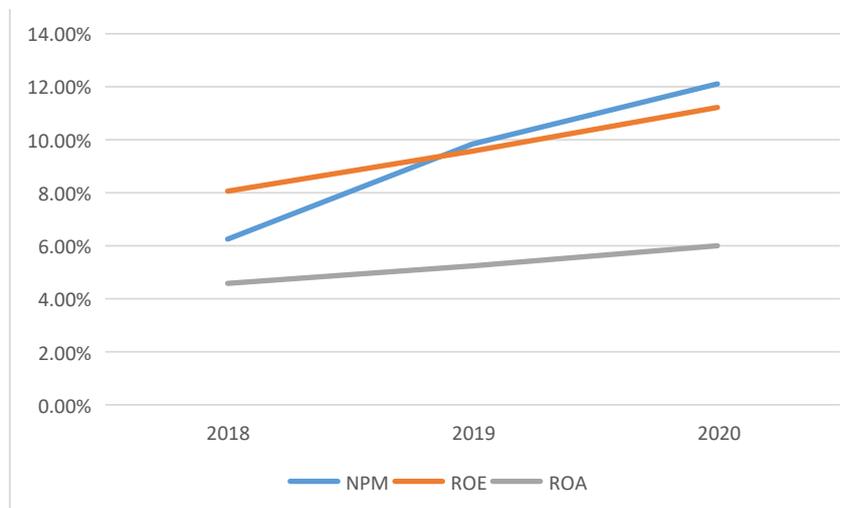
### 4.1. Results

The research location is PT Medikaloka Hermina Tbk where researchers use secondary data obtained from the publication of the Indonesia Stock Exchange as well as financial data published on the website (Johnston, 2014), namely PT Medikaloka Hermina Tbk, so that researchers simply search for data related to PT Medikaloka's profitability report. Hermina Tbk in 2018 - 2020. In addition, the idx website provides flexibility for investors and researchers to examine the company's financial performance in a transparent manner (Ameli et al., 2020). The discussion of the results of the calculation of profitability ratios consisting of Net Profit Margin, Return On Assets, and Return On Equity at PT Medikaloka Hermina Tbk in 2018 - 2020 is as follows:

**Table 1.** Financial performance

	2018	2019	2020
Profit After Tax	191.024	264.454	349.026
Income	3.058.091	2.687.719	2.882.809
Equity	2.369.709	2.764.434	3.110.599
Assets Total	4.171.207	5.047.787	5.812.593

\* Unit: Millions



**Figure 1.** Profitability Ratio

### 4.2. Net Profit Margin

A high Net Profit Margin indicates that (Chris B Murphy, 2020):

1. The higher the NPM, the thicker the company's profit.
2. The higher the NPM value, the more efficient the company is operating (Derouiche et al., 2021). Companies can reduce unnecessary costs, so that the company is able to maximize the net profit obtained (Stavropoulou et al., 2019).

3. In anticipation of a surge in raw materials, operational costs such as an increase in employee salaries, or an increase in financial costs such as interest payments. If the NPM of the company is thicker, then when the above occurs, the company's net profit does not drop significantly.

**Table 2. Data of Net Profit Margin**

	2018	2019	2020
Profit After Tax	191,024	264,454	349,026
Income	3,058,091	2,687,719	2,882,809
<b>NPM Ratio</b>	<b>6.25%</b>	<b>9.84%</b>	<b>12.11%</b>

\*Unit: Millions

Discussion on PT Medikaloka Hermina Tbk's Net Profit Margin (NPM) has increased in 2018 - 2020 with an average increase of 3% each year. Based on the level of the company's financial health, companies with an NPM level above 5% (NPM > 5%) are said to be healthy (Chris B Murphy, 2020). PT Medikaloka Hermina Tbk in 2018 - 2020 had an NPM value above 5% for 3 consecutive years so that the health level of PT Medikaloka Hermina Tbk's NPM can be said to be healthy and high.

### 4.3. Return on Equity

High Return On Equity indicates that (Shim & Lansner, 2020):

1. The higher the ROE, the more efficient the company is in using its own capital to generate investors' profits invested in the company (Andersen & Maibom, 2020).
2. An increase in the ROE ratio from year to year in the company means that there is an increase in the net profit of the company concerned.

The increase in net income can be used as an indication that the company's value is also increasing. Because the increase in the net profit of a company concerned will cause a stock price which means an increase in the value of the company (Zhou & Yang, 2020).

**Table 3. Data of Return On Equity**

	2018	2019	2020
Profit After Tax	191,024	264,454	349,026
Equity	2,369,709	2,764,434	3,110,599
<b>ROE Ratio</b>	<b>8.06%</b>	<b>9.57%</b>	<b>11.22%</b>

\*Unit: Millions

Discussion on the Return on Equity (ROE) of PT Medikaloka Hermina Tbk shows an increase in 2018 - 2020 with an average increase of 1% - 2% per year; So it can be concluded that the company's ability to generate net income from equity increases. However, if it is based on the health of the financial performance of Return On Equity, the

company can be said to be healthy if the ROE value is more than 12% (Hargrave, 2019). PT Medikaloka Hermina Tbk. ROE for 3 years was below 12%, so it can be said that this company is not healthy.

#### 4.4. Return on Asset

High Return On Asset (ROA) indicates that the company has a great opportunity to increase growth. But if the total assets used by the company do not provide profit, then the company will suffer losses and will hinder the company's growth (Farago & Tédongap, 2018).

Return on Asset (ROA) describes the extent to which the rate of return of all assets owned by the company.

**Table 4.** Data of *Return On Asset*

	2018	2019	2020
Profit After Tax	191,024	264,454	349,026
Total Aset	4,171,207	5,047,787	5,812,593
<b>ROA Ratio</b>	<b>4.58%</b>	<b>5.24%</b>	<b>6.00%</b>

\*Unit: Millions

Discussion of PT Medikaloka Hermina Tbk's Return on Assets (ROA) shows an increase in 2018-2020 with an average increase of 0.5% - 1% so it can be concluded that the company's ability to generate net income from total assets increases. If it is based on the health of the financial performance of Return On Assets, the company is said to be healthy if the ROA value is above 2% (Morgan et al., 2009) (ROA > 2%). PT Medikaloka Hermina Tbk ROA for 3 years is above 2% so it can be said that this company is healthy.

## V. Conclusion and Recommendation

### 5.1. Conclusion

The conclusions of this study are:

1. An increase in the NPM value indicates a more productive company performance, thus increasing investor confidence in investing in the company. This ratio shows what percentage of net income is derived from each sale or revenue. The greater this ratio, the better the company's ability to generate high profits (Chris B Murphy, 2020). In 2018-2020 the NPM ratio of PT Medikaloka Hermina Tbk increased, indicating that profitability and financial performance were high, based on income.
2. A high ROE level indicates that a company can obtain a high level of profit compared to its equity level, in other words, the management's ability to use its share capital for its operations generates additional profits for the company (Huang et al., 2020). PT Medikaloka Hermina Tbk's ROE growth ratio in 2018 - 2020 increased, but PT Medikaloka Hermina Tbk's ROE ratio was still below 12%. This shows that the

profitability and financial performance of PT Medikaloka Hermina Tbk is still not effective enough, based on its equity.

3. An increase in the value of ROA shows that the company has a great opportunity to increase growth, but if the total assets used by the company do not provide profit, the company will suffer losses and will inhibit growth (Farago & Tédongap, 2018). In the ROA ratio of PT Medikaloka Hermina Tbk in 2018 - 2020 it has increased. This shows that profitability and financial performance are quite optimal, based on total assets.

## 5.2. Recommendation

The author's suggestions for future research in order to obtain improvements, including:

1. Researchers who are interested in conducting research in the same field can use other proxies that are more diverse given the many variables to measure the company's financial performance.
2. Further research is expected to compare with several health industry companies in the Indonesia Stock Exchange, so that it can provide an overview of health companies that have good financial performance.

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## Profitability Ratio Analysis at PT. Medikaloka Hermina, TBK.

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### Abstract

This study aims to determine the company's financial performance by using profitability ratio analysis, where the profitability ratio is a ratio that aims to determine the company's ability in generating profit over a certain period and also provides an overview of the level of management effectiveness in carrying out its operations. Profitability ratio consists of three ratios, among others Return On Assets, Return On Equity and Net Profit Margin. The research object is PT Medikaloka Hermina Tbk, where the health services company has done IPO (Initial Public Offering) or initial public offering so that economic growth of company very rapidly. The purpose of this study is to test and analyze the financial performance of the company at PT. Medikaloka Hermina Tbk. year 2018 - 2020 if reviewed from the profitability ratio. The sample of this research is financial reports from PT Medikaloka Hermina Tbk for 2018 - 2020 published on the Indonesia Stock Exchange website.

**Keywords:** Company Profitability, Initial Public Offering

**JEL Classification :** M21

**Type of paper:** Research Paper

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## I. Introduction

The growth of the health industry in the world is growing rapidly where the world community is increasingly concerned about their health (Tan & Juan, 2019), various hospitals have started competing to provide the best service for their patients, one of which is PT Medikaloka Hermina Tbk. The company operates a sizeable network of private hospitals in Indonesia. Initial Public Offering (IPO), which is known as a gateway for companies to obtain as much investment funds as possible from investors to increase their business capital, so that with many investors participating in providing capital assistance, companies can expand their business wings.

Medikaloka Hermina Tbk (HEAL) was established on May 7, 1999 and started commercial operations in 1985. Based on the Company's Articles of Association, the scope of activities of HEAL is doing business in the field of health services. Medikaloka Hermina Tbk operates 28 multi-specialty general hospitals with a total of 2,780 beds, which provide a range of specialist medical services, including maternal and child health services, complex surgical procedures, laboratory services, radiology and imaging facilities, fertility treatments and general health services. , pharmacies, diagnostic and emergency services. (Red : <http://britama.com/index.php/2018/07/sejarah-dan-profil-singkat-heal>)

On May 4, 2018, HEAL obtained an effective statement from the Financial Services Authority (OJK) to conduct an Initial Public Offering of HEAL Shares (IPO) to the public of 351,380,800 shares with a nominal value of Rp100, - per share with an offering price of Rp3,700. per share. These shares were listed on the Indonesia Stock Exchange (IDX) on May 16, 2018. (Red: <http://britama.com/index.php/2018/07/sejarah-dan-profil-sendek-heal>)

The large growth in the number of hospitals under PT Medikaloka Hermina Tbk has generated interest for researchers to discuss how the growth in financial performance is seen from its profitability ratio, because the profitability ratio represents the company's success (Husain et al., 2020) and how it contributes to the progress of PT Medikaloka Hermina Tbk after conducting the IPO, considering that the IPO contributed to increasing the company's business capital (Honjo, 2020). In connection with this, the authors set the title in this study, namely "Profitability Ratio Analysis at PT Medikaloka Hermina Tbk". The purpose of this research is to analyze the company's financial performance at PT Medikaloka Hermina Tbk in 2018 - 2020 in terms of profitability ratios.

## II. Literature Review

### 2.1. Net Profit Margin (NPM)

Net profit margin is the ratio of net profits to revenues for a company or business segment . Typically expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit. The equation to calculate net profit margin is:  $\text{net margin} = \text{net profit} / \text{revenue}$ . BREAKING DOWN 'Net Profit Margin' Net margins vary from company to company, and certain ranges can be expected in certain industries, as similar business constraints exist in each

distinct industry. Low profit margins don't necessarily equate to low profits (CHRIS B Murphy, 2019).

## 2.2. Return On Equity (ROE)

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. {ROE} is expressed as a percentage and calculated as: Return on Equity = Net Income/Shareholder's Equity Net income is for the full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock.) Shareholder's equity does not include preferred shares (Hargrave, 2019).

## 2.3. Return On Assets (ROA)

Definition of Return On Assets (ROA) on Investopedia - An indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to (Investopedia, 2016).

## III. Methodology

The sample in this study was PT Medikaloka Hermina Tbk in 2018 - 2020. The data collection method used in this study was the documentation study method. Documentation is one of the quantitative data collection methods (Joye, 2005) obtained through the Indonesian Capital Market Dictionary (ICMD) which is the financial statement information of companies listed on the Indonesia Stock Exchange, with specialization in financial reports at PT Medikaloka Hermina Tbk.

The data analysis method used is descriptive quantitative (Cartier et al., 2006), which is an analysis based on the calculation of ratios to determine the level of profitability used as a basis for decision making (Cartier et al., 2006). Data in the form of financial reports are analyzed using financial ratios needed to be able to obtain information about profitability consisting of Return On Asset Ratio (ROA) (Gallo, 2016), Return On Equity Ratio (ROE) (Pointer & Khoi, 2019), Net Profit Margin Ratio (NPM) (CHRIS B Murphy, 2019) to assess company performance. This profitability ratio is calculated by:

$$\text{Net Profit Margin} = \frac{\text{ProfitAfterTax}}{\text{Income}} \times 100 \%$$

$$\text{Return on Equity} = \frac{\text{ProfitAfterTax}}{\text{Equity}} \times 100 \%$$

$$\text{Return on Asset} = \frac{\text{ProfitAfterTax}}{\text{TotalAsset}} \times 100 \%$$

## IV. Results and Discussion

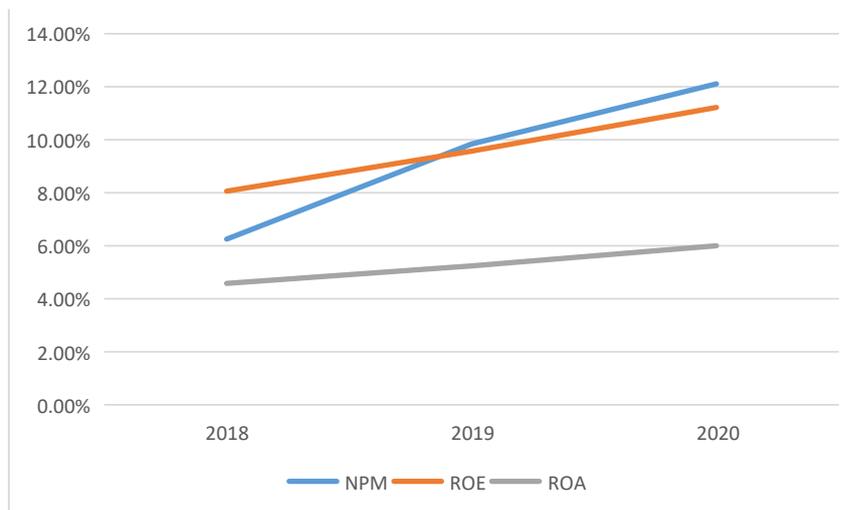
### 4.1. Results

The research location is PT Medikaloka Hermina Tbk where researchers use secondary data obtained from the publication of the Indonesia Stock Exchange as well as financial data published on the website (Johnston, 2014), namely PT Medikaloka Hermina Tbk, so that researchers simply search for data related to PT Medikaloka's profitability report. Hermina Tbk in 2018 - 2020. In addition, the idx website provides flexibility for investors and researchers to examine the company's financial performance in a transparent manner (Ameli et al., 2020). The discussion of the results of the calculation of profitability ratios consisting of Net Profit Margin, Return On Assets, and Return On Equity at PT Medikaloka Hermina Tbk in 2018 - 2020 is as follows:

**Table 1.** Financial performance

	2018	2019	2020
Profit After Tax	191.024	264.454	349.026
Income	3.058.091	2.687.719	2.882.809
Equity	2.369.709	2.764.434	3.110.599
Assets Total	4.171.207	5.047.787	5.812.593

\* Unit: Millions



**Figure 1.** Profitability Ratio

### 4.2. Net Profit Margin

A high Net Profit Margin indicates that (Chris B Murphy, 2020):

1. The higher the NPM, the thicker the company's profit.
2. The higher the NPM value, the more efficient the company is operating (Derouiche et al., 2021). Companies can reduce unnecessary costs, so that the company is able to maximize the net profit obtained (Stavropoulou et al., 2019).

3. In anticipation of a surge in raw materials, operational costs such as an increase in employee salaries, or an increase in financial costs such as interest payments. If the NPM of the company is thicker, then when the above occurs, the company's net profit does not drop significantly.

**Table 2. Data of Net Profit Margin**

	2018	2019	2020
Profit After Tax	191,024	264,454	349,026
Income	3,058,091	2,687,719	2,882,809
<b>NPM Ratio</b>	<b>6.25%</b>	<b>9.84%</b>	<b>12.11%</b>

\*Unit: Millions

Discussion on PT Medikaloka Hermina Tbk's Net Profit Margin (NPM) has increased in 2018 - 2020 with an average increase of 3% each year. Based on the level of the company's financial health, companies with an NPM level above 5% (NPM > 5%) are said to be healthy (Chris B Murphy, 2020). PT Medikaloka Hermina Tbk in 2018 - 2020 had an NPM value above 5% for 3 consecutive years so that the health level of PT Medikaloka Hermina Tbk's NPM can be said to be healthy and high.

### 4.3. Return on Equity

High Return On Equity indicates that (Shim & Lansner, 2020):

1. The higher the ROE, the more efficient the company is in using its own capital to generate investors' profits invested in the company (Andersen & Maibom, 2020).
2. An increase in the ROE ratio from year to year in the company means that there is an increase in the net profit of the company concerned.

The increase in net income can be used as an indication that the company's value is also increasing. Because the increase in the net profit of a company concerned will cause a stock price which means an increase in the value of the company (Zhou & Yang, 2020).

**Table 3. Data of Return On Equity**

	2018	2019	2020
Profit After Tax	191,024	264,454	349,026
Equity	2,369,709	2,764,434	3,110,599
<b>ROE Ratio</b>	<b>8.06%</b>	<b>9.57%</b>	<b>11.22%</b>

\*Unit: Millions

Discussion on the Return on Equity (ROE) of PT Medikaloka Hermina Tbk shows an increase in 2018 - 2020 with an average increase of 1% - 2% per year; So it can be concluded that the company's ability to generate net income from equity increases. However, if it is based on the health of the financial performance of Return On Equity, the

company can be said to be healthy if the ROE value is more than 12% (Hargrave, 2019). PT Medikaloka Hermina Tbk. ROE for 3 years was below 12%, so it can be said that this company is not healthy.

#### 4.4. Return on Asset

High Return On Asset (ROA) indicates that the company has a great opportunity to increase growth. But if the total assets used by the company do not provide profit, then the company will suffer losses and will hinder the company's growth (Farago & Tédongap, 2018).

Return on Asset (ROA) describes the extent to which the rate of return of all assets owned by the company.

**Table 4.** Data of *Return On Asset*

	2018	2019	2020
Profit After Tax	191,024	264,454	349,026
Total Aset	4,171,207	5,047,787	5,812,593
<b>ROA Ratio</b>	<b>4.58%</b>	<b>5.24%</b>	<b>6.00%</b>

\*Unit: Millions

Discussion of PT Medikaloka Hermina Tbk's Return on Assets (ROA) shows an increase in 2018-2020 with an average increase of 0.5% - 1% so it can be concluded that the company's ability to generate net income from total assets increases. If it is based on the health of the financial performance of Return On Assets, the company is said to be healthy if the ROA value is above 2% (Morgan et al., 2009) (ROA > 2%). PT Medikaloka Hermina Tbk ROA for 3 years is above 2% so it can be said that this company is healthy.

## V. Conclusion and Recommendation

### 5.1. Conclusion

The conclusions of this study are:

1. An increase in the NPM value indicates a more productive company performance, thus increasing investor confidence in investing in the company. This ratio shows what percentage of net income is derived from each sale or revenue. The greater this ratio, the better the company's ability to generate high profits (Chris B Murphy, 2020). In 2018-2020 the NPM ratio of PT Medikaloka Hermina Tbk increased, indicating that profitability and financial performance were high, based on income.
2. A high ROE level indicates that a company can obtain a high level of profit compared to its equity level, in other words, the management's ability to use its share capital for its operations generates additional profits for the company (Huang et al., 2020). PT Medikaloka Hermina Tbk's ROE growth ratio in 2018 - 2020 increased, but PT Medikaloka Hermina Tbk's ROE ratio was still below 12%. This shows that the

profitability and financial performance of PT Medikaloka Hermina Tbk is still not effective enough, based on its equity.

3. An increase in the value of ROA shows that the company has a great opportunity to increase growth, but if the total assets used by the company do not provide profit, the company will suffer losses and will inhibit growth (Farago & Tédongap, 2018). In the ROA ratio of PT Medikaloka Hermina Tbk in 2018 - 2020 it has increased. This shows that profitability and financial performance are quite optimal, based on total assets.

## 5.2. Recommendation

The author's suggestions for future research in order to obtain improvements, including:

1. Researchers who are interested in conducting research in the same field can use other proxies that are more diverse given the many variables to measure the company's financial performance.
2. Further research is expected to compare with several health industry companies in the Indonesia Stock Exchange, so that it can provide an overview of health companies that have good financial performance.

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# The Effect of Debt To Asset Ratio, Long Term Debt To Equity Ratio and Time Interest Earned Ratio on Profitability

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## Abstract

This study's purpose is to analyse the influence of DAR, LDER, and TIER on Profitability. Populations of data are taken food and beverage companies listed in BEI from 2009-2011. Samples taken using purposive sampling method and total of samples used during study period is 39 samples. Hypothesis used in this study is multiple linear regression. Based on F test, the results indicated DAR, LDER, and TIER have a significant effect on Profitability. DAR, LDER, and TIER partial effect on Profitability was evaluated using T test. DAR have a negative and non-significant effect on ROE at -0,252. LDER have a negative and significant effect on ROE at -0,437 and TIER have a positive but non-significant effect on ROE at 0,00020.

**Keywords:** Debt To Asset Ratio (DAR), Long Term Debt To Equity Ratio (LDER), Time Interest Earned Ratio (TIER), Profitability

**JEL Classification :** M21

**Type of paper:** Research Paper

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## I. Introduction

The company's goal that shareholders want is to maximize firm value (Brealey et al, 2011). One of the ways to improve financial performance is by optimizing existing financial resources, namely how the company is able to meet funding needs and manage the sources of meeting funding needs to run and develop its business or better known as the capital structure. According to Kamaludin (2011), the capital structure is a combination or mixture of long-term financing sources.

According to Brigham and Houston (2011), the optimal capital structure of a company is defined as a structure that will maximize its share price. Harmono (2009) describes the general indicators used to determine the optimal composition of the capital structure are Debt to Assets Ratio (DAR), Long Term Debt to Equity Ratio (LDER) and Time Interest Earned Ratio (TIER). DAR, which is also often referred to as the debt ratio, describes the strategy for using funds originating from debt to finance company assets. LDER reflects the company's ability to meet long-term debt through its own capital. TIER shows measuring the amount of guaranteed profit to pay long-term debt interest.

Company profits are obtained by carrying out its activities in order to obtain sufficient funds so that the company's operations can run smoothly. Judging from the origin, sources of capital consist of internal sources and external resources. Capital generated from within the company as an internal source can be in the form of retained earnings and accumulated depreciation. Meanwhile, external sources of funds are sources of company funds that come from outside the company, namely funds obtained from creditors or shareholders, for example debt.

Accounts payable is an obligation to deliver money, goods, or services to other parties in the future as a result of transactions that have occurred in the past or before. In terms of the period of repayment or debt repayment tools, it can be divided into two groups, namely short-term debt (current debt) and long-term debt.

Companies that choose to finance their business from debt must be careful, because debt has risks, one of which is interest costs. Interest costs affect the profits earned by the company. This is in accordance with Hartono's (2008) statement that debt has a risk, the higher the risk of the company, the higher the level of profitability that is expected in return for the high risk, and vice versa.

## II. Literature Review

### 2.1. Food and Beverage Companies

Food and beverage companies are manufacturing companies, namely processing industrial companies that process raw materials into semi-finished or finished goods. Manufacturing companies are synonymous with factories that apply machines, tools, engineering techniques and labor. This term can be used for human activities ranging from handicrafts to high-tech production. However, this term is more often used for the industrial world, where raw materials are converted into finished goods on a large scale.

Food and beverage companies are one of the business sectors that continue to experience growth. In line with the increasing population growth in Indonesia, the volume of demand for food and beverages continues to increase as well. The tendency of Indonesian people to enjoy ready-to-eat food has led to the emergence of many new companies in the food and beverage sector because they consider the food and beverages industry sector to have favorable prospects both now and in the future (Nur, 2016).

## 2.2. Profitability

Profitability can be defined as the ability of a company to earn profits related to sales, total assets, and long-term debt (Syamsuddin, 2009). Meanwhile, according to Umar (2001), profitability is the company's ability to generate profits from every sale made. According to Kasmir (2012), the profitability ratio is a ratio to assess a company's ability to seek profit.

The ratio provides a measure of the level of management effectiveness of a company. This is addressed by the profit generated from sales and investment income (Yana, 2016). The point is that the use of this ratio shows the efficiency of the company. The use of profitability ratios can be done by using comparisons between the various components in the financial statements, especially the balance sheet financial statements and the income statement.

So, profitability is the ability of a company to carry out its activities to generate profits through all the resources owned by the company. To increase this, the company must make a larger investment in assets that are profitable and actually provide results for the company. Profits are also often compared to other financial conditions, such as sales, assets and equity. This comparison is often called the profitability ratio. According to Subramanyam and Wild (2010), there are ratios that are part of the capital structure ratio, namely Debt to Asset Ratio (DAR), Longterm Debt to Equity Ratio (LDER) and Time Interest Earned Ratio (TIER).

Factors that affect profitability include:

### 1) DAR

According to Brigham and Houston (2011), Debt to Asset Ratio (DAR) states that the ratio of total debt to total assets, commonly known as the debt ratio, measures the percentage of funds provided by creditors. The ratio of total debt to assets is calculated as follows:

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Asset}}$$

This ratio measures the overall need for funds or assets used to guarantee debt. A high ratio means that the company uses high debt / financial leverage. The use of high debt will increase profitability, on the other hand, high debt will also increase risk. If sales are high, then the company can get high profits (because it on-

ly pays fixed interest). Conversely, if sales fall, the company is forced to suffer losses, because of the interest that must be paid.

## 2) LDER

Long Term Debt to Equity Ratio (LDER) according to Hery (2016) states that the ratio of long-term debt to equity is a ratio used to measure the proportion of long-term debt to capital. This ratio is used to measure how much long-term debt is guaranteed by equity / equity. A ratio that exceeds 1: 1 indicates debt financing to existing capital. The ratio of total long-term debt to equity is calculated as follows:

$$\text{LDER} = \frac{\text{Total Long Term Debt}}{\text{Total Equity}}$$

This ratio measures the amount of equity that is used as collateral for long-term debt.

## 3) TIER

Time Interest Earned Ratio (TIER) is the resulting interest rate ratio showing how far or how many times the company's ability to pay interest. The company's ability here is measured by the amount of profit before interest and tax (Hery, 2016). The time interest income ratio can be calculated by the formula:

$$\text{TIER} = \frac{\text{Earning Before Interest Tax}}{\text{Interest Expense}}$$

This ratio measures the amount of guaranteed profit to pay long-term debt interest. The ratio calculates how much profit before interest and tax is available to cover fixed interest expenses. A high ratio indicates a safe situation, because there are larger funds available to cover interest payments.

## 2.3. Factors Affecting Company Profitability

### 2.3.1. The effect of the DAR variable on profitability

Debt to Assets Ratio (DAR) or also known as debt ratio, which shows how much the company's assets are financed through debt. Thus, the greater the debt in asset financing, the greater the company's liability burden to external parties. The increased responsibility burden may result in the company being unable to pay. The results of research by Setiana and Rahayu (2012), Purwitasari (2013), Kodongo et.al (2014), Effendi (2017) Thi Phuong & Nguyet Phan (2017) prove that DAR has a negative effect on company profitability.

### 2.3.2. The effect of the LDER variable on profitability

Long Term Debt Equity Ratio is used to measure how much long-term debt is guaranteed by equity / equity. A ratio that exceeds 1: 1 indicates debt financing exceeds existing capital, and of course illustrates what is not good for the company. Conversely, if the company can manage its funding through long-term debt, it will

make financial conditions better. The effect of Long Term Debt Equity Ratio on company profitability is shown in research conducted by Odongo Kodongo and Thabang Mokoaleli-Mokoteli and Leonard Maina (2014), Varun Dawar (2014) Suandini & Suzan (2015) Agum Sulistio and Muhammad Saifi (2017)). The negative relationship between LDER and company profitability is evidenced by Kodongo et.al (2014) and Suandini & Suzan (2015).

### 2.3.3. The effect of the TIER variable on profitability

Time Interest Earned Ratio (TIER) is also called the coverage ratio, which measures the extent to which income can decrease without sacrificing the company's ability to pay interest costs. The greater the company's debt, the greater the interest on its debt and the greater the reduction in company profits. Decreasing profits will affect firm value. Conversely, if the debt interest expense is not large, the company can cover it well.

This exposure shows that the Time Interest Earned Ratio affects the company's profitability and value. The results showed the influence of TIER on company profitability was shown by Suandini and Suzan (2015), Agum Sulistio and Muhammad Saifi (2017).

According to Nasution (2008), the hypothesis is a tentative statement which is a guess or conjecture about what we observe in an attempt to understand it. The function of the hypothesis is to test the truth of a theory, give ideas to develop a theory, expand knowledge about the symptoms learned. Based on the framework that has been submitted, the authors draw the hypothesis or the provisional allegation as follows:

- H1 : Debt to Asset Ratio (DAR) has a significant effect on profitability in food and beverage sector companies.
- H2 : *Long term Debt to Equity Ratio* (LDER) has a significant effect on profitability in food and beverage sector companies.
- H3 : *Time Interest Earned Ratio* (TIER) has a significant effect on profitability in food and beverage sector companies.
- H4 : *Debt to Asset Ratio* (DAR), *Long term Debt to Equity Ratio* (LDER), *Time Interest Earned Ratio* (TIER) simultaneously have an significant effect on profitability in the food and beverage sector companies.

## III. Methodology

This type of research is a type of explanatory research with a quantitative approach. The purpose of this study was to determine the effect of DAR, LDER and TIER on profitability. Explanatory research is research that aims to test a theory or hypothesis in order to strengthen or even reject existing theories or research hypotheses. The independent variables in this study are Debt to Asset Ratio (DAR) (X1), Longterm Debt to Equity Ratio (LDER) (X2), Time Interest Earned Ratio (TIER) (X3) to profitability (Y) in food and beverage sector companies. listed on the IDX for the period 2009-2011.

### 3.1. Population and Sample

Population is a generalization consisting of objects or subjects that have certain qualities and characteristics that are determined by the researcher to study and then draw conclusions. (Sugiyono, 2016). The population in this study were food and beverage companies listed on the IDX in 2009-2011. According to Soehartono (2004), the sample is a part of the population to be studied and which is considered to describe the population. The samples in this study were 39 food and beverage companies. This study uses purposive sampling technique, namely the sampling technique not based on random, regional or strata, but based on the existence of considerations that focus on certain objectives (Arikunto, 2006).

### 3.2. Data Collection

The data used in this study is secondary data, namely data obtained or collected by researchers from various existing sources with panel data (pool data), namely data consisting of several data objects with several research periods. Sources of data in this study were obtained from financial reports of finance companies listed on the Indonesia Stock Exchange for the period 2009-2011.

## IV. Results and Discussion

### 4.1. Results

**Table 1.** Normalitas Test  
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		39
Normal Parameters a,b	Mean	.0000000
	Std. Deviation	.15982221
Most Extreme Differences	Absolute	.116
	Positive	.116
	Negative	-.108
Kolmogorov -Smirnov Z		.722
Asymp. Sig. (2-tailed)		.674

a. Test distribution is Normal.

b. Calculated from data.

Source: Processed data

From the calculation, the sig value is obtained. 0.674 (can be seen in Table 3) or the results of the normality test on the regression residual value yields a value of A. Significance > 5%; then the H0 requirement is accepted, namely that the normality assumption is met.

**Table 2.** Multicollinearity Test

Model	Tolerance	VIF
DAR	0.702	1.425
LDER	0.774	1.292
TIER	0.972	1.029

Source: Processed data

From the test results, it can be concluded that there is no multicollinearity between the independent variables. Thus the assumption test for the absence of multicollinearity can be fulfilled.

**Table 3.** Multiple Panel Data Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	1 (Constant)	.11458	.066		
X1	-.25216	.128	-.125	-1.962	.058
X2	-.43695	.069	-.385	-6.353	.000
X3	.00020	.000	.069	1.274	.211

Source: Processed data

Based on the above interpretation, it can be seen that the contribution of the independent variables to the dependent variable, including DAR is -0.252, LDER is -0.4369, and TIER is 0.00020. So it can be denied that TIER has a positive effect on profitability. In other words, increasing TIER will increase profitability.

**Table 3.** Correlation and Determination Coefficients

Model	R	R Square	Adjusted R Square
1	.950	.903	.892

Source: Processed data

The coefficient of determination is used to calculate the magnitude of the influence or contribution of the independent variable to the dependent variable. From the above analysis, the R<sup>2</sup> (coefficient of determination) is 0.903. This means that 90.3% of the ROE variable will be influenced by the independent variables, namely DAR (X1), LDER (X2), and TIER (X3). While the remaining 9.7% of the ROE variable will be influenced by other variables which are not discussed in this study.

## 4.2. Discussion

### 4.2.1. Effect of Debt to Asset Ratio on Profitability

Debt to Assets Ratio (DAR) shows the share of total needs that is financed by debt. The greater the DAR indicates that many funds are financed with debt. The re-

gression coefficient for the DAR variable is (0.252). This shows that an increase in DAR of 1 rupiah will cause a decrease in Return On Equity (ROE) of 0.252 rupiah. The results of this test indicate a significant negative effect of DAR on ROE.

#### **4.2.2. Effect of Longterm Debt to Equity Ratio (LDER) on Profitability**

Based on the results of simultaneous testing of ROE, this study found a negative effect of Longterm Debt to Equity Ratio (LDER) on Return On Equity (ROE). From the results of the t test that has been conducted, it can be concluded that the company's ability to meet long-term debt through its own capital has an effect on ROE.

#### **4.2.3. Effect of Time Interest Earned Ratio (TIER) on Profitability**

The Time Interest Earned Ratio (TIER) regression coefficient which is positive at 0.00020 explains that there is a direct relationship with ROE. This explains that every 1 rupiah increase from operating profit to interest expense (TIER) contributes to an ROE of 0.00020 rupiah.

## **V. Conclusion and Recommendation**

### **5.1. Conclusion**

From the overall results it can be concluded that the independent variables (DAR, LDER, and TIER) have a significant effect on profitability simultaneously and partially is LDER. And from here it can be seen that the three independent variables that have the most dominant influence on profitability are LDER because they have the largest beta coefficient and t count.

### **5.2. Recommendation**

Based on the results of this study, there are several suggestions, namely as follows:

1. Based on the R-squared value, it shows that the ratio of DAR, LDER and TIER only affects firm value, therefore for further research it is necessary to add other variables that have a big influence.
2. Future research can use sample research in different industries or can be developed using samples from other groups or indexes listed on the Indonesia Stock Exchange.
3. For investors, if they are going to invest in a Food and Beverage company, they must evaluate the value of the company, if the value of the company is in a good position or increases gradually then investors have the opportunity to benefit from their investment and the company will not feel disadvantaged.

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# The Effect of Debt To Asset Ratio, Long Term Debt To Equity Ratio and Time Interest Earned Ratio on Profitability

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## Abstract

This study's purpose is to analyse the influence of DAR, LDER, and TIER on Profitability. Populations of data are taken food and beverage companies listed in BEI from 2009-2011. Samples taken using purposive sampling method and total of samples used during study period is 39 samples. Hypothesis used in this study is multiple linear regression. Based on F test, the results indicated DAR, LDER, and TIER have a significant effect on Profitability. DAR, LDER, and TIER partial effect on Profitability was evaluated using T test. DAR have a negative and non-significant effect on ROE at -0,252. LDER have a negative and significant effect on ROE at -0,437 and TIER have a positive but non-significant effect on ROE at 0,00020.

**Keywords:** Debt To Asset Ratio (DAR), Long Term Debt To Equity Ratio (LDER), Time Interest Earned Ratio (TIER), Profitability

**JEL Classification :** M21

**Type of paper:** Research Paper

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## I. Introduction

The company's goal that shareholders want is to maximize firm value (Brealey et al, 2011). One of the ways to improve financial performance is by optimizing existing financial resources, namely how the company is able to meet funding needs and manage the sources of meeting funding needs to run and develop its business or better known as the capital structure. According to Kamaludin (2011), the capital structure is a combination or mixture of long-term financing sources.

According to Brigham and Houston (2011), the optimal capital structure of a company is defined as a structure that will maximize its share price. Harmono (2009) describes the general indicators used to determine the optimal composition of the capital structure are Debt to Assets Ratio (DAR), Long Term Debt to Equity Ratio (LDER) and Time Interest Earned Ratio (TIER). DAR, which is also often referred to as the debt ratio, describes the strategy for using funds originating from debt to finance company assets. LDER reflects the company's ability to meet long-term debt through its own capital. TIER shows measuring the amount of guaranteed profit to pay long-term debt interest.

Company profits are obtained by carrying out its activities in order to obtain sufficient funds so that the company's operations can run smoothly. Judging from the origin, sources of capital consist of internal sources and external resources. Capital generated from within the company as an internal source can be in the form of retained earnings and accumulated depreciation. Meanwhile, external sources of funds are sources of company funds that come from outside the company, namely funds obtained from creditors or shareholders, for example debt.

Accounts payable is an obligation to deliver money, goods, or services to other parties in the future as a result of transactions that have occurred in the past or before. In terms of the period of repayment or debt repayment tools, it can be divided into two groups, namely short-term debt (current debt) and long-term debt.

Companies that choose to finance their business from debt must be careful, because debt has risks, one of which is interest costs. Interest costs affect the profits earned by the company. This is in accordance with Hartono's (2008) statement that debt has a risk, the higher the risk of the company, the higher the level of profitability that is expected in return for the high risk, and vice versa.

## II. Literature Review

### 2.1. Food and Beverage Companies

Food and beverage companies are manufacturing companies, namely processing industrial companies that process raw materials into semi-finished or finished goods. Manufacturing companies are synonymous with factories that apply machines, tools, engineering techniques and labor. This term can be used for human activities ranging from handicrafts to high-tech production. However, this term is more often used for the industrial world, where raw materials are converted into finished goods on a large scale.

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This exposure shows that the Time Interest Earned Ratio affects the company's profitability and value. The results showed the influence of TIER on company profitability was shown by Suandini and Suzan (2015), Agum Sulistio and Muhammad Saifi (2017).

According to Nasution (2008), the hypothesis is a tentative statement which is a guess or conjecture about what we observe in an attempt to understand it. The function of the hypothesis is to test the truth of a theory, give ideas to develop a theory, expand knowledge about the symptoms learned. Based on the framework that has been submitted, the authors draw the hypothesis or the provisional allegation as follows:

- H1 : Debt to Asset Ratio (DAR) has a significant effect on profitability in food and beverage sector companies.
- H2 : *Long term Debt to Equity Ratio* (LDER) has a significant effect on profitability in food and beverage sector companies.
- H3 : *Time Interest Earned Ratio* (TIER) has a significant effect on profitability in food and beverage sector companies.
- H4 : *Debt to Asset Ratio* (DAR), *Long term Debt to Equity Ratio* (LDER), *Time Interest Earned Ratio* (TIER) simultaneously have an significant effect on profitability in the food and beverage sector companies.

## III. Methodology

This type of research is a type of explanatory research with a quantitative approach. The purpose of this study was to determine the effect of DAR, LDER and TIER on profitability. Explanatory research is research that aims to test a theory or hypothesis in order to strengthen or even reject existing theories or research hypotheses. The independent variables in this study are Debt to Asset Ratio (DAR) (X1), Longterm Debt to Equity Ratio (LDER) (X2), Time Interest Earned Ratio (TIER) (X3) to profitability (Y) in food and beverage sector companies. listed on the IDX for the period 2009-2011.

### 3.1. Population and Sample

Population is a generalization consisting of objects or subjects that have certain qualities and characteristics that are determined by the researcher to study and then draw conclusions. (Sugiyono, 2016). The population in this study were food and beverage companies listed on the IDX in 2009-2011. According to Soehartono (2004), the sample is a part of the population to be studied and which is considered to describe the population. The samples in this study were 39 food and beverage companies. This study uses purposive sampling technique, namely the sampling technique not based on random, regional or strata, but based on the existence of considerations that focus on certain objectives (Arikunto, 2006).

### 3.2. Data Collection

The data used in this study is secondary data, namely data obtained or collected by researchers from various existing sources with panel data (pool data), namely data consisting of several data objects with several research periods. Sources of data in this study were obtained from financial reports of finance companies listed on the Indonesia Stock Exchange for the period 2009-2011.

## IV. Results and Discussion

### 4.1. Results

**Table 1.** Normalitas Test  
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		39
Normal Parameters a,b	Mean	.0000000
	Std. Deviation	.15982221
Most Extreme Differences	Absolute	.116
	Positive	.116
	Negative	-.108
Kolmogorov -Smirnov Z		.722
Asymp. Sig. (2-tailed)		.674

a. Test distribution is Normal.

b. Calculated from data.

Source: Processed data

From the calculation, the sig value is obtained. 0.674 (can be seen in Table 3) or the results of the normality test on the regression residual value yields a value of A. Significance > 5%; then the H0 requirement is accepted, namely that the normality assumption is met.

**Table 2.** Multicollinearity Test

Model	Tolerance	VIF
DAR	0.702	1.425
LDER	0.774	1.292
TIER	0.972	1.029

Source: Processed data

From the test results, it can be concluded that there is no multicollinearity between the independent variables. Thus the assumption test for the absence of multicollinearity can be fulfilled.

**Table 3.** Multiple Panel Data Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.11458	.066		1.737	.091
X1	-.25216	.128	-.125	-1.962	.058
X2	-.43695	.069	-.385	-6.353	.000
X3	.00020	.000	.069	1.274	.211

Source: Processed data

Based on the above interpretation, it can be seen that the contribution of the independent variables to the dependent variable, including DAR is -0.252, LDER is -0.4369, and TIER is 0.00020. So it can be denied that TIER has a positive effect on profitability. In other words, increasing TIER will increase profitability.

**Table 3.** Correlation and Determination Coefficients

Model	R	R Square	Adjusted R Square
1	.950	.903	.892

Source: Processed data

The coefficient of determination is used to calculate the magnitude of the influence or contribution of the independent variable to the dependent variable. From the above analysis, the R<sup>2</sup> (coefficient of determination) is 0.903. This means that 90.3% of the ROE variable will be influenced by the independent variables, namely DAR (X1), LDER (X2), and TIER (X3). While the remaining 9.7% of the ROE variable will be influenced by other variables which are not discussed in this study.

## 4.2. Discussion

### 4.2.1. Effect of Debt to Asset Ratio on Profitability

Debt to Assets Ratio (DAR) shows the share of total needs that is financed by debt. The greater the DAR indicates that many funds are financed with debt. The re-

gression coefficient for the DAR variable is (0.252). This shows that an increase in DAR of 1 rupiah will cause a decrease in Return On Equity (ROE) of 0.252 rupiah. The results of this test indicate a significant negative effect of DAR on ROE.

#### **4.2.2. Effect of Longterm Debt to Equity Ratio (LDER) on Profitability**

Based on the results of simultaneous testing of ROE, this study found a negative effect of Longterm Debt to Equity Ratio (LDER) on Return On Equity (ROE). From the results of the t test that has been conducted, it can be concluded that the company's ability to meet long-term debt through its own capital has an effect on ROE.

#### **4.2.3. Effect of Time Interest Earned Ratio (TIER) on Profitability**

The Time Interest Earned Ratio (TIER) regression coefficient which is positive at 0.00020 explains that there is a direct relationship with ROE. This explains that every 1 rupiah increase from operating profit to interest expense (TIER) contributes to an ROE of 0.00020 rupiah.

## **V. Conclusion and Recommendation**

### **5.1. Conclusion**

From the overall results it can be concluded that the independent variables (DAR, LDER, and TIER) have a significant effect on profitability simultaneously and partially is LDER. And from here it can be seen that the three independent variables that have the most dominant influence on profitability are LDER because they have the largest beta coefficient and t count.

### **5.2. Recommendation**

Based on the results of this study, there are several suggestions, namely as follows:

1. Based on the R-squared value, it shows that the ratio of DAR, LDER and TIER only affects firm value, therefore for further research it is necessary to add other variables that have a big influence.
2. Future research can use sample research in different industries or can be developed using samples from other groups or indexes listed on the Indonesia Stock Exchange.
3. For investors, if they are going to invest in a Food and Beverage company, they must evaluate the value of the company, if the value of the company is in a good position or increases gradually then investors have the opportunity to benefit from their investment and the company will not feel disadvantaged.

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## The Effect Of Capital Adequacy Ratio and Loan To Deposit Ratio on Banking Profitability

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### Abstract

The objective of this research is to analyse the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO), toward Profitability of Domestic Banks and Foreign Banks in January 2003 until December 2007. This research also used Chow Test to analyse the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO), toward Profitability between State Owned Banks and Foreign Banks. This research used time series data from Bank Indonesia's three-monthly domestic Banks and Foreign Banks published financial reports. After passed the purposive sampling phase, the number of valid samples is 10 Domestic Banks and 10 Foreign Banks. This research used multiple regression analysis to analyse the data. This research also used Chow Test to analyse the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO), toward Profitability between Domestic Banks and Foreign Banks. Empirical evidence shows that Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) has a positive and significant influence toward profitability in State Owned Banks. And only Size has positive and significant influenced toward profitability in foreign bank. The result of this research shows that adjusted R<sup>2</sup> from Domestic Banks is 90,2% and Foreign Banks is 45,1%. F test shows that in simultant, Domestic Banks, Foreign Banks, variable independent influence variable dependent. Chow Test result shows influence of Capital Adequacy Ratio (CAR), loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO) toward Profitability between Domestic Banks and Foreign Banks. This research result can be consideration for investor in invested whether domestic bank and foreign bank. Existence global competition that always change caused domestic bank and foreign bank must follow the flow of global competition changing to maintain survive, with this competition then needed for future research.

**Keywords:** Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, BOPO, Profitability.

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## I. Introduction

The Banking Industry plays an important role in economic development as a Financial Intermediary or intermediary between parties who are excessively funded and those who need funds. According to Ali (2006), a bank is defined as a financial institution that has a business license to operate as a bank, namely accepting placements of funds entrusted by the public to the bank, providing loans to the public and the business world in general, giving acceptance of various forms of debt securities. submitted to the bank and issued a check. The banking business itself was born because in reality not all people who save use their savings for their daily needs, while many other business activities require more capital than the ability of the business owners (Jaya, 1998). The general trend of competition in banking is checking risk taking with adequate capital and changing deposit guarantees to introduce the underlying risk of the system.

Basel Capital Accord found three pillars, namely the first pillar of the capital adequacy ratio, the second pillar of supervision, and the third pillar of market discipline. Supervisors have access to the extent to which the bank has capital with existing risks and the bank will disclose information on their financial structure, bookkeeping practices, risk exposure and capital adequacy at the right time. This competition is conducted to attract investors to raise funds in banks with more adequate security guarantees (Vives, 2001). According to Sofyan (2003), banking performance can be measured using the average loan interest rate, the average deposit interest rate, and the bank profitability. Furthermore, in his research, he stated that the deposit interest rate is a measure of weak performance and causes problems, so that in his research it was concluded that profitability was the most appropriate indicator to measure the performance of a bank.

The measure of profitability used is the rate of return equity (ROE) for companies in general and return on assets (ROA) in the banking industry. Return on Asset (ROA) focuses on the company's ability to obtain earnings in the company's operations, while Return on Equity (ROE) only measures the return obtained from the company's owner's investment in the business (Siamat, 2002). So that in this study, ROA is used as a measure of banking performance. The reason for choosing Return On Asset (ROA) as a measure of performance is because ROA is used to measure the effectiveness of a company in generating profits by utilizing its assets.

According to Suad Husnan (1998) ROA is the ratio between profit before tax to total assets, the greater the ROA indicates the better financial performance, because the rate

of return (return) is greater. If ROA increases, it means that the company's profitability increases, so that the final impact is an increase in profitability enjoyed by shareholders (Husnan, 1998). Banking companies in Indonesia include domestic banks and foreign banks.

Domestic banks consist of state-owned banks, national foreign exchange private commercial banks, national non-foreign exchange private commercial banks, regional development banks, and joint venture banks. The banks studied in this study are domestic banks and foreign banks. The reason for choosing a domestic bank and a foreign bank is because domestic banks and foreign banks are different from the perspective of ownership, but both domestic banks and foreign banks compete for market share in Indonesia. Domestic banks are banks whose majority ownership is owned by the central government, while foreign banks are banks owned by foreign investors (not Indonesian citizens) (Kasmir, 2005). Bank management has two objectives, namely long-term goals and short-term goals. The long-term goal of a bank is to seek profit or profit, while the short-term goal of a bank is to meet minimum reserves, good service to customers and strategies for investing (Nopirin, 1992: 23).

## II. Methodology

Research on the profitability of domestic banks with foreign banks in Indonesia with the observation year for the quarterly period January 2003-December 2007 used secondary data, namely the financial statements of banks in Indonesia published by Bank Indonesia consisting of balance sheets and income statements obtained through [www.bi.go.id](http://www.bi.go.id). The population of this research is all domestic banks and foreign banks in Indonesia which operate between the quarterly period of January 2003 to December 2007. The sampling uses purposive sampling method, according to Umar (2004) using purposive sampling technique. The population of domestic banks is 119 banks. After taking the sample, it turns out that 109 domestic banks do not meet the criteria, while foreign banks with a population of 11 banks have one foreign bank that does not meet the criteria. The criteria used in determining the sample include: Banking companies in Indonesia consisting of domestic banks and foreign banks, domestic banks and foreign banks that publish complete financial reports during the study period, namely the annual period from January 2003 to December 2007, domestic banks include all banks which are managed by the government, both those that have gone public and those that have not yet go public.

The data analysis technique was performed using the classical assumption test, multiple regression analysis test, and hypothesis testing. Based on the research that has been done, the following conclusions can be drawn:

1. In domestic banks, the adjusted R<sup>2</sup> value = 0.902, which means that 90.2% of the variation in profitability (ROA) can be explained by variations in the four independent variables of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size and BOPO, while the rest 9.8% is explained by other variables not

studied. For foreign banks, the value of Adjusted R2 = 0.451, which means that 45.1% variation in profitability (ROA) can be explained by variations in the four independent variables, Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size and BOPO, while the remaining 54, 9% explained by other variables not studied.

2. In domestic banks, the simultaneous test value is  $F = 197.069$  and the significance is 0.000. For foreign banks, the simultaneous test value is  $F = 31,717$  with a significance value of 0,000. So it can be concluded that in domestic banks the independent variable Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size and BOPO simultaneously (together) have an effect on profitability (ROA) in domestic and foreign banks.
3. Based on the results of the t-test statistical test (partially): Capital Adequacy Ratio (CAR) has a positive and significant effect on the profitability of domestic banks. Capital Adequacy Ratio (CAR) has a positive and insignificant effect on the profitability of foreign banks.
4. Loan to Deposit Ratio (LDR) has a positive and significant effect on the profitability of domestic banks. Loan to Deposit Ratio (LDR) has a negative and significant effect on the profitability of foreign banks.
5. Size has a negative and significant effect on the profitability of domestic banks. Size has a positive and significant effect on the profitability of foreign banks.
6. BOPO has a negative and significant effect on the profitability of domestic banks. BOPO has a negative and significant effect on the profitability of foreign banks.
7. There are significant differences between domestic banks and foreign banks in terms of the effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, BOPO on profitability

### III. Results and Discussion

Foreign banks are keen to see this opportunity by implementing short-term goals, namely good service to customers and strategies for investing, this can be seen from the increase in the number of foreign bank offices during the period 2003 - 2007 to seize market share for domestic banks. The following is the number of branch offices both domestic banks and foreign banks spread throughout Indonesia for the 2003-2007 period are presented in Table 1 as follows:

**Table 1.** Number of Domestic and Foreign Bank Offices

Bank Group	Year				
	2003	2004	2005	2006	2007
Domestic Bank					
Number of offices	7661`	7870	8164	8996	9174

Change in Number of offices	-	1,02%	1,06%	1,17%	1,19%
Foreign Bank					
Number of offices	69	69	72	114	140
Change in Number of offices	-	0%	1,04%	1,58%	2,03%

Source: Indonesian Banking Statistics

Based on Table 1.1, it can be seen that the number of offices of both state-owned banks, joint venture banks and foreign banks. In 2004 the lowest number of offices was domestic banks at 1.02% and the highest was foreign banks in 2007 at 2.03%. In 2005 the number of domestic bank offices was 1.06% higher than foreign banks at 1.04%. In 2006 there was a striking change, namely the high number of foreign bank offices at 1.58% and the lowest number of domestic bank offices at 1.17%. In 2007, the highest number of offices was foreign banks 2.03% and the last was domestic banks 1.19%. An unbalanced increase in the number of offices between domestic and foreign banks, seen in 2007 of 2.03%, further tightened business competition in the banking sector.

The increase in foreign banks in national banking raises two issues (1) the effect of their existence in the commercial bank system (2) unbalanced competition and differences in performance between foreign banks and domestic banks. The entry of foreign banks can boost the quality and availability of banking services in key markets by increasing competition, the ability to take advantage of modern applications of banking skills and technology, encouraging the development of bank supervision and legal networks and increasing access to various countries to the international capital market (Awdeh, 2005). As for the data on the dynamics of the movement of banking financial ratios recorded at Bank Indonesia from January 2003 to December 2007, the general picture is shown in table 2 & 3 below:

**Table 2.** Average Financial Ratio Return On Asset (ROA), Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR), SIZE, OEOI at Domestic Banks and Foreign Banks Period January 2003-December 2007 (Domestic Bank)

Domestic Bank						
Periode	ROA (%)	CAR (%)	LDR (%)	SIZE/ Total Asset (Jutaan)	BOPO (%)	
2003	Jan-Mar	2,9	21,4	58,2	63.460.124	79,8
	Apr-Jun	3,1	19,3	63,2	64.567.652	79,3
	Jul-Sept	3,3	19,6	60,2	65.661.642	79,2
	Okt-Des	3,7	19,0	69,3	66.588.026	79,4
2004	Jan-Mar	4,1	21,4	70,0	64.788.773	57,4
	Apr-Jun	4,1	20,1	67,3	64.661.398	70,2
	Jul-Sept	4,0	19,9	67,2	65.072.909	69,6
	Okt-Des	3,7	19,3	67,5	69.712.881	71,4
2005	Jan-Mar	3,6	21,3	67,7	69.184.001	71,7
	Apr-Jun	3,1	18,8	68,6	71.358.458	74,9

	<b>Jul-Sept</b>	2,7	17,5	68,7	71.454.489	77,2
	<b>Okt-Des</b>	2,8	17,6	64,6	75.297.430	78,9
2006	<b>Jan-Mar</b>	2,7	20,6	65,1	74.486.976	79,6
	<b>Apr-Jun</b>	2,4	20,4	64,8	76.740.907	81,7
	<b>Jul-Sept</b>	2,5	19,9	65,3	79.137.296	80,4
	<b>Okt-Des</b>	2,3	19,3	63,9	85.422.469	80,6
2007	<b>Jan-Mar</b>	2,9	21,6	65,7	85.140.322	77,1
	<b>Apr-Jun</b>	2,8	19,0	65,8	88.536.760	76,5
	<b>Jul-Sept</b>	2,8	18,2	64,6	91.675.563	76,2
	<b>Okt-Des</b>	2,9	18,0	68	99.425.347	78,2

Source: Bank Indonesia (processed)

**Table 3.** Average Financial Ratio Return On Asset (ROA), Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR), SIZE, OEOI at Domestic Banks and Foreign Banks Period January 2003-December 2007 (Foreign Bank)

<b>Foreign Bank</b>						
<b>Periode</b>	<b>ROA (%)</b>	<b>CAR (%)</b>	<b>LDR (%)</b>	<b>SIZE/ Total Asset (Jutaan)</b>	<b>BOPO (%)</b>	
2003	<b>Jan-Mar</b>	4,3	32,7	70	8.073.019	70,2
	<b>Apr-Jun</b>	4,1	31,1	70,2	8.081.310	67,8
	<b>Jul-Sept</b>	3,9	33,8	67,1	8.010.900	67,1
	<b>Okt-Des</b>	4,9	30,7	58,4	8.884.354	63,7
2004	<b>Jan-Mar</b>	7,1	33,1	59,5	9.097.916	63,1
	<b>Apr-Jun</b>	4,3	31,2	59,5	9.836.841	62,9
	<b>Jul-Sept</b>	4,4	31,6	60,5	10.353.139	60,5
	<b>Okt-Des</b>	4,4	29,0	61,4	10.466.569	60,2
2005	<b>Jan-Mar</b>	5,2	31,9	64,3	11.482.765	71,7
	<b>Apr-Jun</b>	4,1	30,2	72,9	12.574.492	76,8
	<b>Jul-Sept</b>	2,0	28,6	70,9	14.892.579	84,7
	<b>Okt-Des</b>	1,9	30,3	83,3	13.954.236	76,5
2006	<b>Jan-Mar</b>	3,3	33,5	76,2	13.963.965	68,3
	<b>Apr-Jun</b>	3,4	33,7	84,9	14.618.103	69,0
	<b>Jul-Sept</b>	3,8	39,9	84,8	15.117.534	66,9
	<b>Okt-Des</b>	3,3	37,7	85,1	15.403.589	67,9
2007	<b>Jan-Mar</b>	3,6	38,4	90,9	15.601.678	69,8
	<b>Apr-Jun</b>	3,8	42,6	91,2	16.081.122	65,7
	<b>Jul-Sept</b>	3,5	41,4	89,6	16.882.927	66,5
	<b>Okt-Des</b>	3,0	41,8	86,5	17.189.567	70,6

Source: Bank Indonesia (processed)

If seen in table 1.2, the movement of ROA at Domestic Banks is broadly stable, fluctuations ranged from 4.1% points for the highest, namely the January 2004 period to 2.3% points for the lowest, namely in the December 2006 period. at the turn of the year, from

January to December the following year ROA decreased. Meanwhile, the ROA of foreign banks was higher than domestic banks, this can be seen in January 2004 at 7.1% and the lowest in September 2005 at 1.9% and the movement of ROA for foreign banks was very fluctuating.

Then when viewed from the side of Domestic Bank capital which is proxied by the CAR ratio, from the table it can be concluded that the movement of CAR is very volatile with the highest figure of 21.6% in the January 2007 period to the lowest figure of 17.5% in the September 2005 period. the CAR ratio is more than 8%, but if the fluctuation of the CAR is compared to the fluctuation in the ROA ratio, the fluctuation of the CAR ratio is very sharp compared to the movement of the ROA ratio. Looking at the available empirical evidence, the movement of CAR is inversely proportional to the fluctuating movement of ROA, namely in the period January 2003 to January 2007 (see table 1.2). This contradicts the existing theory, where if the CAR ratio increases, then ROA should also increase. For foreign banks, the highest CAR was in June 2007 at 42.6% and the lowest was in September 2005 at 28.6%. CAR movement from 2005 to 2007 was relatively stable and fluctuating. This contradicts the existing theory, where if the CAR ratio increases, the ROA should also increase.

On the movement of the LDR ratio at Domestic Banks, from table 1.2. It can be seen that the highest number was in January 2004 at 70% and the lowest was January 2003 58.2%, the LDR ratio according to the Indonesian bank was 80% to 110% (Dendawijaya, 2003), so it can be concluded in general from the period January 2003 to January 2007, the LDR ratio for all periods did not meet Bank Indonesia standards. If it is related to ROA, it will be clear that the movement of LDR to ROA is irregular and fluctuating. Foreign banks in June 2007 the highest LDR was 91.2% and the lowest was in December 2003 58.4%. The movement of the LDR from year to year was irregular and fluctuating.

This is not in accordance with the theory, where the relationship between LDR and ROA should be directly proportional. Movement Size is measured from the total assets in the Domestic Bank table 1.2. seen fluctuating with the highest increase (in millions) of Rp. 99,425,347, - in December 2007 while the lowest was in January 2003 of Rp. 63,460,124, -. If it is related to ROA, it will be clear that the movement of Size to ROA is very stable. The highest size foreign bank in December 2007 was Rp. 17,189,567, - and the lowest was in January 2003 of Rp. 8,073,019. This is not in accordance with the theory, where the relationship between Size and ROA should be directly proportional. The same thing also happened to the level of operational efficiency at domestic banks which was recorded in the balance sheet of Bank Indonesia, where the BOPO proceeds from January 2003 to January 2007 were of uncertain direction or could be said to fluctuate.

This phenomenon that occurs is not in accordance with the existing theory, where the relationship between BOPO and ROA should be inversely proportional. The standard

figure for the OEOI ratio is below 90% (PBI, 2005), if the BOPO ratio generated by a bank exceeds 90%, it can be concluded that the bank is inefficient in carrying out its operations. If the BOPO ratio is in an efficiency condition, the profit to be obtained will be even greater because the operating costs borne by the bank are getting smaller. With the increase in profit, it is certain that the ROA ratio will also increase. From table 1.2, Domestic banks show that the highest BOPO ratio of 80.6% occurred in the period December 2006 and the lowest was 57.4% in January 2004. But if we observe more closely in relation to the movement of the ROA ratio, it can be concluded that in the fluctuation of the direction of movement of these two ratios are often seen in the same direction. Meanwhile, the highest BOPO for foreign banks was September 2005 84.7% and the lowest was December 2004 60.2%. This contradicts the existing theory, where if the BOPO ratio increases, then ROA should also decrease.

Triono (2007) conducted research on the factors that affect changes in earnings for the next year and two years at commercial banks in Indonesia. Triono's research (2007) shows that an increase in the Loan to Deposit Ratio (LDR) has an effect on the increase in profits earned by banks. Meanwhile, Mudrajad Kuncoro's research in Werdaningtyas (2002) examines that an increase in funds and LDR actually reduces profitability, which means that an increase in LDR has a negative effect on profitability. Minh and Tripe (2002) analyzed the factor that bank size has a positive effect on bank profitability. According to Mamatzakis (2000) bank size has a positive effect on profitability. The same thing is also said by Short (1979), Smirlock (1985) and Akhavein (1985) in Benti (2008) that there is a positive and significant effect between size (using assets and capital as an approach) on profitability.

This theory is in accordance with the research of Timothy & Scott (2000.p.141) analyzing that large banks generally employ fewer employees per dollar of their assets than small banks. One interesting change is the relationship between asset-based size and expenditure controls that small banks with US \$ 300 million in assets generally have the lowest non-interest outlays relative to the income of large banks' assets. According to Athanasoglou (2005), the effect of size growth has a positive effect on profitability, only in a number of aspects, the fact that a bank is growing very large has a negative effect on size on profitability. Research conducted by Mawardi, 2005, concluded that OEOI has a negative effect on bank performance as proxied by ROA. This shows that the greater the ratio of total operating costs to operating income, the lower the ROA. The same thing was expressed by Usman (2003) in his research showing that OEOI has a significant effect on bank profits so that it is predicted that OEOI also has a significant effect on ROA because ROA is influenced by earnings.

From the results of research on empirical data and the diversity of arguments from several existing researchers regarding the effect of financial ratios on profitability (ROA) is an interesting phenomenon to study. This encourages further research to be carried out. This study uses the variable Capital Adequacy Ratio (CAR), Loan to De-

posit Ratio (LDR), Size and BOPO to determine the effect of these variables on the profitability (ROA) of domestic banks and foreign banks. The difference in the influence of the variable Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size and BOPO on the profitability (ROA) of domestic banks and foreign banks was tested using the Chow test.

#### IV. Conclusion and Recommendation

The result of this research shows that adjusted R<sup>2</sup> from Domestic Banks is 90,2% and Foreign Banks is 45,1%. F test shows that in simultant, Domestic Banks, Foreign Banks, variable independent influence variable dependent. Chow Test result shows influence of Capital Adequacy Ratio (CAR), loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO) toward Profitability between Domestic Banks and Foreign Banks. This research result can be consideration for investor in invested whether domestic bank and foreign bank. Existence global competition that always change caused domestic bank and foreign bank must follow the flow of global competition changing to maintain survive, with this competition then needed for future research.

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## The Effect Of Capital Adequacy Ratio and Loan To Deposit Ratio on Banking Profitability

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### Abstract

The objective of this research is to analyse the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO), toward Profitability of Domestic Banks and Foreign Banks in January 2003 until December 2007. This research also used Chow Test to analyse the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO), toward Profitability between State Owned Banks and Foreign Banks. This research used time series data from Bank Indonesia's three-monthly domestic Banks and Foreign Banks published financial reports. After passed the purposive sampling phase, the number of valid samples is 10 Domestic Banks and 10 Foreign Banks. This research used multiple regression analysis to analyse the data. This research also used Chow Test to analyse the influence of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO), toward Profitability between Domestic Banks and Foreign Banks. Empirical evidence shows that Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) has a positive and significant influence toward profitability in State Owned Banks. And only Size has positive and significant influenced toward profitability in foreign bank. The result of this research shows that adjusted R<sup>2</sup> from Domestic Banks is 90,2% and Foreign Banks is 45,1%. F test shows that in simultant, Domestic Banks, Foreign Banks, variable independent influence variable dependent. Chow Test result shows influence of Capital Adequacy Ratio (CAR), loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO) toward Profitability between Domestic Banks and Foreign Banks. This research result can be consideration for investor in invested whether domestic bank and foreign bank. Existence global competition that always change caused domestic bank and foreign bank must follow the flow of global competition changing to maintain survive, with this competition then needed for future research.

**Keywords:** Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, BOPO, Profitability.

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## I. Introduction

The Banking Industry plays an important role in economic development as a Financial Intermediary or intermediary between parties who are excessively funded and those who need funds. According to Ali (2006), a bank is defined as a financial institution that has a business license to operate as a bank, namely accepting placements of funds entrusted by the public to the bank, providing loans to the public and the business world in general, giving acceptance of various forms of debt securities. submitted to the bank and issued a check. The banking business itself was born because in reality not all people who save use their savings for their daily needs, while many other business activities require more capital than the ability of the business owners (Jaya, 1998). The general trend of competition in banking is checking risk taking with adequate capital and changing deposit guarantees to introduce the underlying risk of the system.

Basel Capital Accord found three pillars, namely the first pillar of the capital adequacy ratio, the second pillar of supervision, and the third pillar of market discipline. Supervisors have access to the extent to which the bank has capital with existing risks and the bank will disclose information on their financial structure, bookkeeping practices, risk exposure and capital adequacy at the right time. This competition is conducted to attract investors to raise funds in banks with more adequate security guarantees (Vives, 2001). According to Sofyan (2003), banking performance can be measured using the average loan interest rate, the average deposit interest rate, and the bank profitability. Furthermore, in his research, he stated that the deposit interest rate is a measure of weak performance and causes problems, so that in his research it was concluded that profitability was the most appropriate indicator to measure the performance of a bank.

The measure of profitability used is the rate of return equity (ROE) for companies in general and return on assets (ROA) in the banking industry. Return on Asset (ROA) focuses on the company's ability to obtain earnings in the company's operations, while Return on Equity (ROE) only measures the return obtained from the company's owner's investment in the business (Siamat, 2002). So that in this study, ROA is used as a measure of banking performance. The reason for choosing Return On Asset (ROA) as a measure of performance is because ROA is used to measure the effectiveness of a company in generating profits by utilizing its assets.

According to Suad Husnan (1998) ROA is the ratio between profit before tax to total assets, the greater the ROA indicates the better financial performance, because the rate

of return (return) is greater. If ROA increases, it means that the company's profitability increases, so that the final impact is an increase in profitability enjoyed by shareholders (Husnan, 1998). Banking companies in Indonesia include domestic banks and foreign banks.

Domestic banks consist of state-owned banks, national foreign exchange private commercial banks, national non-foreign exchange private commercial banks, regional development banks, and joint venture banks. The banks studied in this study are domestic banks and foreign banks. The reason for choosing a domestic bank and a foreign bank is because domestic banks and foreign banks are different from the perspective of ownership, but both domestic banks and foreign banks compete for market share in Indonesia. Domestic banks are banks whose majority ownership is owned by the central government, while foreign banks are banks owned by foreign investors (not Indonesian citizens) (Kasmir, 2005). Bank management has two objectives, namely long-term goals and short-term goals. The long-term goal of a bank is to seek profit or profit, while the short-term goal of a bank is to meet minimum reserves, good service to customers and strategies for investing (Nopirin, 1992: 23).

## II. Methodology

Research on the profitability of domestic banks with foreign banks in Indonesia with the observation year for the quarterly period January 2003-December 2007 used secondary data, namely the financial statements of banks in Indonesia published by Bank Indonesia consisting of balance sheets and income statements obtained through [www.bi.go.id](http://www.bi.go.id). The population of this research is all domestic banks and foreign banks in Indonesia which operate between the quarterly period of January 2003 to December 2007. The sampling uses purposive sampling method, according to Umar (2004) using purposive sampling technique. The population of domestic banks is 119 banks. After taking the sample, it turns out that 109 domestic banks do not meet the criteria, while foreign banks with a population of 11 banks have one foreign bank that does not meet the criteria. The criteria used in determining the sample include: Banking companies in Indonesia consisting of domestic banks and foreign banks, domestic banks and foreign banks that publish complete financial reports during the study period, namely the annual period from January 2003 to December 2007, domestic banks include all banks which are managed by the government, both those that have gone public and those that have not yet go public.

The data analysis technique was performed using the classical assumption test, multiple regression analysis test, and hypothesis testing. Based on the research that has been done, the following conclusions can be drawn:

1. In domestic banks, the adjusted R<sup>2</sup> value = 0.902, which means that 90.2% of the variation in profitability (ROA) can be explained by variations in the four independent variables of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size and BOPO, while the rest 9.8% is explained by other variables not

studied. For foreign banks, the value of Adjusted R2 = 0.451, which means that 45.1% variation in profitability (ROA) can be explained by variations in the four independent variables, Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size and BOPO, while the remaining 54, 9% explained by other variables not studied.

2. In domestic banks, the simultaneous test value is  $F = 197.069$  and the significance is 0.000. For foreign banks, the simultaneous test value is  $F = 31,717$  with a significance value of 0,000. So it can be concluded that in domestic banks the independent variable Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size and BOPO simultaneously (together) have an effect on profitability (ROA) in domestic and foreign banks.
3. Based on the results of the t-test statistical test (partially): Capital Adequacy Ratio (CAR) has a positive and significant effect on the profitability of domestic banks. Capital Adequacy Ratio (CAR) has a positive and insignificant effect on the profitability of foreign banks.
4. Loan to Deposit Ratio (LDR) has a positive and significant effect on the profitability of domestic banks. Loan to Deposit Ratio (LDR) has a negative and significant effect on the profitability of foreign banks.
5. Size has a negative and significant effect on the profitability of domestic banks. Size has a positive and significant effect on the profitability of foreign banks.
6. BOPO has a negative and significant effect on the profitability of domestic banks. BOPO has a negative and significant effect on the profitability of foreign banks.
7. There are significant differences between domestic banks and foreign banks in terms of the effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size, BOPO on profitability

### III. Results and Discussion

Foreign banks are keen to see this opportunity by implementing short-term goals, namely good service to customers and strategies for investing, this can be seen from the increase in the number of foreign bank offices during the period 2003 - 2007 to seize market share for domestic banks. The following is the number of branch offices both domestic banks and foreign banks spread throughout Indonesia for the 2003-2007 period are presented in Table 1 as follows:

**Table 1.** Number of Domestic and Foreign Bank Offices

Bank Group	Year				
	2003	2004	2005	2006	2007
Domestic Bank					
Number of offices	7661`	7870	8164	8996	9174

Change in Number of offices	-	1,02%	1,06%	1,17%	1,19%
Foreign Bank					
Number of offices	69	69	72	114	140
Change in Number of offices	-	0%	1,04%	1,58%	2,03%

Source: Indonesian Banking Statistics

Based on Table 1.1, it can be seen that the number of offices of both state-owned banks, joint venture banks and foreign banks. In 2004 the lowest number of offices was domestic banks at 1.02% and the highest was foreign banks in 2007 at 2.03%. In 2005 the number of domestic bank offices was 1.06% higher than foreign banks at 1.04%. In 2006 there was a striking change, namely the high number of foreign bank offices at 1.58% and the lowest number of domestic bank offices at 1.17%. In 2007, the highest number of offices was foreign banks 2.03% and the last was domestic banks 1.19%. An unbalanced increase in the number of offices between domestic and foreign banks, seen in 2007 of 2.03%, further tightened business competition in the banking sector.

The increase in foreign banks in national banking raises two issues (1) the effect of their existence in the commercial bank system (2) unbalanced competition and differences in performance between foreign banks and domestic banks. The entry of foreign banks can boost the quality and availability of banking services in key markets by increasing competition, the ability to take advantage of modern applications of banking skills and technology, encouraging the development of bank supervision and legal networks and increasing access to various countries to the international capital market (Awdeh, 2005). As for the data on the dynamics of the movement of banking financial ratios recorded at Bank Indonesia from January 2003 to December 2007, the general picture is shown in table 2 & 3 below:

**Table 2.** Average Financial Ratio Return On Asset (ROA), Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR), SIZE, OEOI at Domestic Banks and Foreign Banks Period January 2003-December 2007 (Domestic Bank)

Domestic Bank						
Periode	ROA (%)	CAR (%)	LDR (%)	SIZE/ Total Asset (Jutaan)	BOPO (%)	
2003	Jan-Mar	2,9	21,4	58,2	63.460.124	79,8
	Apr-Jun	3,1	19,3	63,2	64.567.652	79,3
	Jul-Sept	3,3	19,6	60,2	65.661.642	79,2
	Okt-Des	3,7	19,0	69,3	66.588.026	79,4
2004	Jan-Mar	4,1	21,4	70,0	64.788.773	57,4
	Apr-Jun	4,1	20,1	67,3	64.661.398	70,2
	Jul-Sept	4,0	19,9	67,2	65.072.909	69,6
	Okt-Des	3,7	19,3	67,5	69.712.881	71,4
2005	Jan-Mar	3,6	21,3	67,7	69.184.001	71,7
	Apr-Jun	3,1	18,8	68,6	71.358.458	74,9

	<b>Jul-Sept</b>	2,7	17,5	68,7	71.454.489	77,2
	<b>Okt-Des</b>	2,8	17,6	64,6	75.297.430	78,9
2006	<b>Jan-Mar</b>	2,7	20,6	65,1	74.486.976	79,6
	<b>Apr-Jun</b>	2,4	20,4	64,8	76.740.907	81,7
	<b>Jul-Sept</b>	2,5	19,9	65,3	79.137.296	80,4
	<b>Okt-Des</b>	2,3	19,3	63,9	85.422.469	80,6
2007	<b>Jan-Mar</b>	2,9	21,6	65,7	85.140.322	77,1
	<b>Apr-Jun</b>	2,8	19,0	65,8	88.536.760	76,5
	<b>Jul-Sept</b>	2,8	18,2	64,6	91.675.563	76,2
	<b>Okt-Des</b>	2,9	18,0	68	99.425.347	78,2

Source: Bank Indonesia (processed)

**Table 3.** Average Financial Ratio Return On Asset (ROA), Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR), SIZE, OEOI at Domestic Banks and Foreign Banks Period January 2003-December 2007 (Foreign Bank)

<b>Foreign Bank</b>						
<b>Periode</b>	<b>ROA (%)</b>	<b>CAR (%)</b>	<b>LDR (%)</b>	<b>SIZE/ Total Asset (Jutaan)</b>	<b>BOPO (%)</b>	
2003	<b>Jan-Mar</b>	4,3	32,7	70	8.073.019	70,2
	<b>Apr-Jun</b>	4,1	31,1	70,2	8.081.310	67,8
	<b>Jul-Sept</b>	3,9	33,8	67,1	8.010.900	67,1
	<b>Okt-Des</b>	4,9	30,7	58,4	8.884.354	63,7
2004	<b>Jan-Mar</b>	7,1	33,1	59,5	9.097.916	63,1
	<b>Apr-Jun</b>	4,3	31,2	59,5	9.836.841	62,9
	<b>Jul-Sept</b>	4,4	31,6	60,5	10.353.139	60,5
	<b>Okt-Des</b>	4,4	29,0	61,4	10.466.569	60,2
2005	<b>Jan-Mar</b>	5,2	31,9	64,3	11.482.765	71,7
	<b>Apr-Jun</b>	4,1	30,2	72,9	12.574.492	76,8
	<b>Jul-Sept</b>	2,0	28,6	70,9	14.892.579	84,7
	<b>Okt-Des</b>	1,9	30,3	83,3	13.954.236	76,5
2006	<b>Jan-Mar</b>	3,3	33,5	76,2	13.963.965	68,3
	<b>Apr-Jun</b>	3,4	33,7	84,9	14.618.103	69,0
	<b>Jul-Sept</b>	3,8	39,9	84,8	15.117.534	66,9
	<b>Okt-Des</b>	3,3	37,7	85,1	15.403.589	67,9
2007	<b>Jan-Mar</b>	3,6	38,4	90,9	15.601.678	69,8
	<b>Apr-Jun</b>	3,8	42,6	91,2	16.081.122	65,7
	<b>Jul-Sept</b>	3,5	41,4	89,6	16.882.927	66,5
	<b>Okt-Des</b>	3,0	41,8	86,5	17.189.567	70,6

Source: Bank Indonesia (processed)

If seen in table 1.2, the movement of ROA at Domestic Banks is broadly stable, fluctuations ranged from 4.1% points for the highest, namely the January 2004 period to 2.3% points for the lowest, namely in the December 2006 period. at the turn of the year, from

January to December the following year ROA decreased. Meanwhile, the ROA of foreign banks was higher than domestic banks, this can be seen in January 2004 at 7.1% and the lowest in September 2005 at 1.9% and the movement of ROA for foreign banks was very fluctuating.

Then when viewed from the side of Domestic Bank capital which is proxied by the CAR ratio, from the table it can be concluded that the movement of CAR is very volatile with the highest figure of 21.6% in the January 2007 period to the lowest figure of 17.5% in the September 2005 period. the CAR ratio is more than 8%, but if the fluctuation of the CAR is compared to the fluctuation in the ROA ratio, the fluctuation of the CAR ratio is very sharp compared to the movement of the ROA ratio. Looking at the available empirical evidence, the movement of CAR is inversely proportional to the fluctuating movement of ROA, namely in the period January 2003 to January 2007 (see table 1.2). This contradicts the existing theory, where if the CAR ratio increases, then ROA should also increase. For foreign banks, the highest CAR was in June 2007 at 42.6% and the lowest was in September 2005 at 28.6%. CAR movement from 2005 to 2007 was relatively stable and fluctuating. This contradicts the existing theory, where if the CAR ratio increases, the ROA should also increase.

On the movement of the LDR ratio at Domestic Banks, from table 1.2. It can be seen that the highest number was in January 2004 at 70% and the lowest was January 2003 58.2%, the LDR ratio according to the Indonesian bank was 80% to 110% (Dendawijaya, 2003), so it can be concluded in general from the period January 2003 to January 2007, the LDR ratio for all periods did not meet Bank Indonesia standards. If it is related to ROA, it will be clear that the movement of LDR to ROA is irregular and fluctuating. Foreign banks in June 2007 the highest LDR was 91.2% and the lowest was in December 2003 58.4%. The movement of the LDR from year to year was irregular and fluctuating.

This is not in accordance with the theory, where the relationship between LDR and ROA should be directly proportional. Movement Size is measured from the total assets in the Domestic Bank table 1.2. seen fluctuating with the highest increase (in millions) of Rp. 99,425,347, - in December 2007 while the lowest was in January 2003 of Rp. 63,460,124, -. If it is related to ROA, it will be clear that the movement of Size to ROA is very stable. The highest size foreign bank in December 2007 was Rp. 17,189,567, - and the lowest was in January 2003 of Rp. 8,073,019. This is not in accordance with the theory, where the relationship between Size and ROA should be directly proportional. The same thing also happened to the level of operational efficiency at domestic banks which was recorded in the balance sheet of Bank Indonesia, where the BOPO proceeds from January 2003 to January 2007 were of uncertain direction or could be said to fluctuate.

This phenomenon that occurs is not in accordance with the existing theory, where the relationship between BOPO and ROA should be inversely proportional. The standard

figure for the OEOI ratio is below 90% (PBI, 2005), if the BOPO ratio generated by a bank exceeds 90%, it can be concluded that the bank is inefficient in carrying out its operations. If the BOPO ratio is in an efficiency condition, the profit to be obtained will be even greater because the operating costs borne by the bank are getting smaller. With the increase in profit, it is certain that the ROA ratio will also increase. From table 1.2, Domestic banks show that the highest BOPO ratio of 80.6% occurred in the period December 2006 and the lowest was 57.4% in January 2004. But if we observe more closely in relation to the movement of the ROA ratio, it can be concluded that in the fluctuation of the direction of movement of these two ratios are often seen in the same direction. Meanwhile, the highest BOPO for foreign banks was September 2005 84.7% and the lowest was December 2004 60.2%. This contradicts the existing theory, where if the BOPO ratio increases, then ROA should also decrease.

Triono (2007) conducted research on the factors that affect changes in earnings for the next year and two years at commercial banks in Indonesia. Triono's research (2007) shows that an increase in the Loan to Deposit Ratio (LDR) has an effect on the increase in profits earned by banks. Meanwhile, Mudrajad Kuncoro's research in Werdaningtyas (2002) examines that an increase in funds and LDR actually reduces profitability, which means that an increase in LDR has a negative effect on profitability. Minh and Tripe (2002) analyzed the factor that bank size has a positive effect on bank profitability. According to Mamatzakis (2000) bank size has a positive effect on profitability. The same thing is also said by Short (1979), Smirlock (1985) and Akhavein (1985) in Benti (2008) that there is a positive and significant effect between size (using assets and capital as an approach) on profitability.

This theory is in accordance with the research of Timothy & Scott (2000.p.141) analyzing that large banks generally employ fewer employees per dollar of their assets than small banks. One interesting change is the relationship between asset-based size and expenditure controls that small banks with US \$ 300 million in assets generally have the lowest non-interest outlays relative to the income of large banks' assets. According to Athanasoglou (2005), the effect of size growth has a positive effect on profitability, only in a number of aspects, the fact that a bank is growing very large has a negative effect on size on profitability. Research conducted by Mawardi, 2005, concluded that OEOI has a negative effect on bank performance as proxied by ROA. This shows that the greater the ratio of total operating costs to operating income, the lower the ROA. The same thing was expressed by Usman (2003) in his research showing that OEOI has a significant effect on bank profits so that it is predicted that OEOI also has a significant effect on ROA because ROA is influenced by earnings.

From the results of research on empirical data and the diversity of arguments from several existing researchers regarding the effect of financial ratios on profitability (ROA) is an interesting phenomenon to study. This encourages further research to be carried out. This study uses the variable Capital Adequacy Ratio (CAR), Loan to De-

posit Ratio (LDR), Size and BOPO to determine the effect of these variables on the profitability (ROA) of domestic banks and foreign banks. The difference in the influence of the variable Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Size and BOPO on the profitability (ROA) of domestic banks and foreign banks was tested using the Chow test.

#### IV. Conclusion and Recommendation

The result of this research shows that adjusted R2 from Domestic Banks is 90,2% and Foreign Banks is 45,1%. F test shows that in simultant, Domestic Banks, Foreign Banks, variable independent influence variable dependent. Chow Test result shows influence of Capital Adequacy Ratio (CAR), loan to Deposit Ratio (LDR), Size, Operations Expenses to Operations Income (BOPO) toward Profitability between Domestic Banks and Foreign Banks. This research result can be consideration for investor in invested whether domestic bank and foreign bank. Existence global competition that always change caused domestic bank and foreign bank must follow the flow of global competition changing to maintain survive, with this competition then needed for future research.

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