Proceedings



BEST PRACTICES: SYNCHRONIZING THE CORPORATE CULTURE WITH THE SPIRIT OF INNOVATION, SUSTAINABILITY, AND GOOD GOVERNANCE

The Metropole Hotel Phuket, 25th - 27th July 2019

Editors:

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PREFACE

Transformation into digitalization has taken over all aspects of business in year 2019. Success in converting to transformation requires careful co-operation, planning and participation. Over the years, we have seen a change in a role of traditional leadership workplace. Innovation and sustainability are becoming the driving engines for corporations to strive in the more complex globalized market. As businesses are moving across national and cultural borders, good corporate governance is then playing an important role to ensure the sustainability of the business.

With this current situation, The Business Management Program of Petra Christian University cooperation with The Business Management Program of Phuket Rajabhat University conducts the third international conference on management and entrepreneurship (the 3rd i-CoME) to address the issues on innovation, sustainability, and governance. This conference is made possible with the support of Jurnal Manajemen dan Kewirausahaan (Journal of Management & Entrepreneurship), an accredited scientific journal, and several other accredited journals. The conference will present six keynote speakers from six different countries such as USA, UK-China, Mexico, and India.

This conference is also calling for research articles and papers from scholars, researchers, and students from all over the world. There are six sub-themes with various topics covering on management and entrepreneurship that are ready to be explored and discussed. The conference will be a forum where fellow academics share experiences, exchange knowledge, work hand-in-hand, utilize a new technology, and find managerial solutions for a better business world. The detailed information is available in the i-CoME 2019 website: i-come.petra.ac.id.

Indonesia, August 9, 2019 Editor

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THE PRESENT CONDITIONS OF THE SMES IN THE ANDAMAN TRIANGLE CLUSTER SOUTHERN OF THAILAND

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ABSTRACT

The present conditions of the SMEs in the Andaman Triangle Cluster Southern of Thailand. The results revealed that: The Andaman Triangle Cluster consist of three provinces: Phuket, Phang-Nga, and Krabi. These provinces had a high potential for tourism business due to the beautiful beaches and underwater resources. The location, basic infrastructures, traditions and culture, as well as facilities helped boost tourism on these islands. It was found that the SMEs in the three provinces could contribute a large amount of earnings for the area as well as jobs for the people. About 80% of income in the tourism business of the three provinces came from the SMEs. The SMEs in the three provinces were heterogeneous, which composed of various types of business. Most of the businesses were owned by an individual, and involved with service business. The average number of employees in each business was less than 10 people, and earned about 1–5 million baht per year. The average permanent assets of each business was found to be 1–5 million baht and over, with the average net profit of 5–10 % per year.

Keywords: SMEs, Andaman, andaman triangle, southern of thailand.

INTRODUCTION

Small and medium enterprises (SMEs) are considered as importance components of the economic and social systems and is considered as the main mechanism to restore and strengthen the economic progress of various countries as an important source of income generation and employment for the country. It is also a tool for solving poverty by distributing income to rural areas with lower economics growth. Small and medium enterprises play an important role in the economic growth of various countries in various dimensions such as being a source of employment, generating income for the country, creating good living for people in many countries. Especially in exports, it is found that technological advances and various supporting factors from free trade have made SMEs increasingly play an important role in international business. OECD (1997) estimated that more than one-third volume of exports in Asia was from SMEs, while more than one-fourth of the export volume in Europe and North America were also come from SMEs. In additional, in some countries (such as Italy, Southern Korea, China) SMEs play very important roles to the economy of these countries. That is, SMEs entrepreneurs have more than 50% of the country's exports. For SMEs in ASEAN, there are a large number of SMEs from 97–99% of the total number of enterprises in each country. There is an employment from 53 percent in Malaysia to 97 percent in Indonesia. It also has an important contribution to the GDP of the country from 30 percent in Malaysia to 58 percent in Indonesia (Sato, 2014).

For ASEAN countries, the number of SMEs in ASEAN accounts for 96 percent of the total number of enterprises, and the employment is 50 to 85 percent of all employment within each member country. In addition, it is found that SMEs have a significant proportion (Contribution) in Gross Domestic Product (GDP) between 30 to 53 percent, and exports in ASEAN countries from SMEs are between 19 and 31 percent. Therefore, SMEs in ASEAN are not only important for job creation and generate income but also an important economic pillar of ASEAN. SME development is therefore necessary to achieve sustainable development and is important for reaching the objectives of sustainable economic growth of ASEAN (Siriphatasophon, 2016).

Thailand is the 51st largest in the world with an area of 513,115 square kilometers, and is the 20th most population country in the world, about 67 million people, and is also a new industrial country with the main income from the industries and services. Thailand has many famous tourist attractions which generates income for the country as well as exports that are important in economic development. With the country's GDP worth around 334,026 million US dollars, Thailand's economy is considered the 32nd largest in the world. In addition, Thailand is located on an important strategic location and is the gateway to the heart of Asia, the most important center of the current growing economy (Siriphatasophon, 2016).

The importance of SMEs makes the government agencies of many countries, including Thailand, determine various measures to promote and support in many ways to improve its weaknesses, including setting up a specialized unit to set policies and specific promotion plans in the same ways like other ASEAN member countries which is to focus on pushing for SMEs to have more potential and competitiveness. The agencies that are responsible for promoting and supporting small and medium enterprises in Thailand are the Office of Small and Medium Enterprises Promotion (OSMEP). The main task of OSMEP is to set the policies and the potential development plan of SMEs entrepreneurs. Therefore, OSMEP has developed the 3rd SMEs promotion plan (2012–2016). In this development of the plan, there was a consideration of linking with the relevant plans, such as the 11th National Economic and Social Development Plan (2012–2016), strategic plans of various ministries as well as provincial development plans. (Office of Small and Medium Enterprises Promotion, 2015)

When analyzing the environment and potential of Thai SMEs, it is found that the strengths of Thai SMEs are having artistic skills and service mind. If Thai wisdom is able to apply in products and services, it will enhance Thai products to be more prominent. However, the potential development of Thai enterprises in the past often faced with low ability to access capital, resulting in less use of modern technology and lack of research and development. In addition, Thai SMEs still have weaknesses in other areas such as traditional management, foreign language communication which is still limited to many groups and enterprises that still lack communication with government agencies due to the establishment of an unauthorized organizations. Recognizing such weaknesses, many government agencies in Thailand try to promote and support in various areas such as finance, marketing, administration and the introduction of new innovations and improvements of government agencies' operation to be more concise and agile (OSMEP, 2014).

An important motive that makes a lot of people enter into small and medium enterprises (SMEs) is a low difficulty in the establishment of small and medium enterprises (SMEs), independent operation, flexible management and lower operating costs than large enterprises. The operation of small and medium enterprises (SMEs), whether in the form of a single owner, partnership or company, all have the same investment goal which is profit from investments. However, there are many entrepreneurs who do not success as targeted in the current economy. Many businesses lack liquidity, working capital, or receiving reduced profits resulting in the termination of workers partly due to the lack of strength in provincial businesses. 90 percent of the failures of small and medium enterprises (SMEs) come from the lack of business management skills or ability, etc. (Rumakom, 1997). Therefore, the promotion and development of small and medium enterprises (SMEs) is therefore a matter that the concerned agencies should pay great attention to help businesses to succeed.

The southern part of Thailand is another place that has a variety of tourist attractions, and they are also quality tourist attractions in both natural attractions and cultural attractions and other tourist attractions. Especially in the Andaman Triangle, it consists of three provinces, namely Phuket, Phang-Nga, and Krabi. They are provinces with major, world-famous tourist selling point of the country. It can be seen that the importance of the Andaman Triangle Province is that it is a group of provinces with tourism potential, full of tourism resources as a tourist attraction that generates income for Thailand and creating a lot of jobs for the people. From the growth of tourism, it results in the increasing number of small and medium enterprises, and the business managements are varied in different characteristics and management methods according to the basis of entrepreneurs. Different business operations often encounter different problems, therefore, the study of the status of small and medium enterprises in the Andaman Triangle must focus on developing SMEs and expanding the results.

LITERATURE REVIEW

Key Characteristics of Small and Medium Enterprises (SMEs)

Department of Industrial Promotion, Ministry of Industry (2002), has defined the characteristics of small and medium enterprises (SMEs) which have two defining criteria, which is, to define from the advance value of fixed assets and the number of employments for each type of business. The criteria for classifying small and medium enterprises (SMEs) of the Ministry of Industry are defined as follows:

Table 1 Criteria for Classifying Small and Medium Enterprises (SMEs) of the Ministry of Industry

Establishment	Fixed As	set Value	Number of Employments		
Establishment	Medium Business	Small Business	Medium Business	Small Businesses	
Production	Up to 200 million baht	Up to 50 million baht	Up to 200 people	up to 50	
Trading Wholesale Retail	Up to 100 million baht	Up to 50 million baht	Up to 50 people,	Up to 25 people,	
Services	Up to 60 million baht Up to 200 million	Up to 30 million baht Up to 50 million baht,	Up to 30 people, Up to 200 people,	Up to 15 people Up to 50 people	
	baht,	1	1 1 1	1 1 1	

Source: Department of Industrial Promotion, Ministry of Industry, 2002.

Characteristics of small and medium enterprises (SMEs).

Any occupation is different depending on the nature of the process. The small and medium enterprises (SMEs) have the following features that should be known (Manjaiarn, 2014):

- 1. Easy accessing to the business because of low funds and facilities for business establishment. If the problem of loss occurs during the operation, the recovery is easier than a large business.
- 2. Flexibility in management. Entrepreneurs can control the business thoroughly and closely.
- 3. Business operations, regardless the business is the manufacturing, distribution or service provision, are highly flexible, in line with the production and trade era that requires fast response as well as the production and trade that focus on a variety of forms or services rather than focusing on quantity.
- 4. Able to create specific expertise to achieve efficiency.

Problems of Small and Medium Enterprises in Thailand.

Problems and obstacles occur in every type of business operation that may hinder the progress of the business and undermine the encouragement of entrepreneurs. They may occur from all directions both from the external environment that affects the business and the potential limitations of the business itself. Many small and medium business entrepreneurs in Thailand face many problems. The problems that are often encountered can be summarized as follows (Srisom, 2000).

Marketing problems. Small and medium enterprises are most likely to meet the needs of local markets or domestic market but they still lack the knowledge and ability in other marketing especially the international market. At the same time, the ease of transportation as well as trade liberalization makes large enterprises and foreign products come to compete with local or country's products produced by small and medium-sized enterprises. Shortage of funds. Small and medium enterprises often face problems in requesting loans from financial institutions to invest or expand investments or as working capital. This is because there is no systematic accounting and lack of loan guarantee causing them to rely on informal loan and have to pay high interest rates. Labor issues. Workers working in small and medium enterprises have high turnover problems, that is, when they are more skilled, they will move out to work in a large factory with better systems and rewards, therefore, resulting in uneven quality of labor and discrete development affecting the production efficiency and product quality.

Production technology problems. In general, small and medium enterprises often use uncomplicated manufacturing techniques because of low investment and the employees lack basic knowledge that supports modern academic techniques. It leads to a lack in development of product models as well as developing good quality standards. Management limitations. Small and medium enterprises often lack knowledge in management or system administration. They often rely on the experience of learning from mistakes and on family members or relatives for helping hands. In this type of administration, despite the advantages of thorough care if the business is not large, but when the business begins to expand, if the management is not improved to be systematic, it will cause problems. Accessing government promotion. A large number of small and medium enterprises are often informal establishments, such as production at home, row house factories without factory registration, commercial registration or trade registration. These enterprises or factories often close themselves from using government services. Even businesses or factories that are registered correctly, often do not want to interfere with government agencies due to their incorrect behavior in tax payment, environmental preservation, and safety provision as determined in law. In addition, it is the same in investment promotion. Although the government has reduced investment and employment conditions or has motivated small and medium enterprises to propose for more investment promotion, however, from the research data, it is found that only 8.1% of small and medium enterprises have the opportunity to receive government investment promotion.

Service limitations, development promotion of public and private organizations. Promotion and development of small and medium enterprises in the past were carried out by relevant government and private agencies such as the Department of Industrial Promotion, Department of Skill Development, Department of Export Promotion, Office of the Board of Investment, Industrial Finance Corporation of Thailand as well as various trade and industry associations. However, because of the small and medium sized industries are many and scattered throughout the country together with the limitations of such agencies, such as in terms of personnel, budget, number of branch offices in the region, the support provisions in various areas are not be able to respond thoroughly and adequately. Limitation of information awareness. Due to various problems and limitations above, small and medium enterprises generally have weaknesses in receiving news on various aspects, such as government policies and measures, marketing information, etc.

Review of basic knowledge about small and medium enterprises (SMEs). It can be concluded that the criteria that must be used to determine which business is a small business is that the business must not have a very high sales volume, have a small number of employees, use low budget and the owner must manage the business by himself which is consistent with the criteria for the division of small and medium enterprises (SMEs) of the Ministry of Industry, that is, it is determined from the advanced value of fixed assets and the number of employment. The Ministry of Industry has also divided the types of small and medium enterprises into four categories: production, service, wholesale and retail. The distinctive characteristics of this type of business are it can easily enter into the business, flexibility in management, high flexibility, respond quickly to customer needs and can create specific expertise to achieve efficiency. The problems that are often found in small and medium enterprises (SMEs) in Thailand include marketing problems, shortage of funds, labor issues production technology problems, management limitations, government promotion access, service limitations and limitation of information awareness etc. By this knowledge, the researcher will use it as a guideline for creating questions and use as a guideline for observing the characteristics of each business that is the main data provider for research to analyze data and summarize research results.

RESEARCH METHOD

- 1. Population in research: entrepreneurs or representatives of small and medium enterprises (SMEs) who have registered their legal entity with the Provincial Commercial Office until 2013 and still continue their operation until present. The total population in area of operations in the Andaman Triangle Province is 20,981 persons (Office of Small and Medium Enterprises Promotion, 2014). After using the technique of sampling and calculated according to the formulas 559 people are selected as samples for the research (Krejcie & Morgan, 1970).
- 2. Research tools: Using the collection of the tool quality development by presenting to four tool examination experts to examine the content validity of the tool.
- 3. Collecting two types of data, namely, document research and questionnaire collection. The data collection period is during May 2014–August 2016.
- 4. Analysis of using ready-made programs using basic statistics including percentage, mean, standard deviation.

DISCUSSION

The study results showed that the state enterprises ministry of small and medium enterprises (SMEs) in the Andaman Triangle Provinces (Phuket, Phang-Nga, and Krabi) which are the provinces in the southern region with high potential in the tourism industry, well known and popular for tourists from all over the world for a long time. Considering the number of small and medium enterprises in Andaman Triangle Province which is registered as a juristic person, it is found that in 2013, there were 20,981 small and medium enterprises (SMEs) who are legal entities, accounting for 3.06 percent of the number of legal enterprises across the country.

It consist of 20,636 small enterprises (SE), accounting for 3.01 percent of the total number of enterprises in the jurisdiction in the whole country, or 98.35 percent of the number of small and medium enterprises that are legal entities in the Andaman Triangle, and 345 medium-sized enterprises (ME), representing 0.05% of the total number of enterprises that are juristic persons in the whole country, or 1.64% of the number of small and medium enterprises that are legal entities in the Andaman Triangle provinces.

Medium and small enterprises in the Andaman Triangle take important parts in creating jobs and generating revenue for the province. Each year, more than 80% of the income from tourists can be made from tourism in the Southern region and almost 80 percent of the income from foreign tourists is considered an important economy of the country.

Small and medium enterprises in the Andaman Triangle are very vary (Heterogeneous group) and SMEs can be found in extensive business activities. Most of them are single owner businesses, accounting for 60.6 percent and 51.3 percent are service enterprises which grow alongside tourism. Most of them have less than 10 regular employees, accounting for 53.5 percent. The business has fixed assets ranging from 1–5 million baht or more. Which the average annual sales amount is 1–5 million baht or more Net profit per average sales per year is not more than 5–10 percent. In management, it is found that enterprises have financial planning, but often faced with marketing problems with an average of 3.38 due to lack of marketing activities and market surveys. For finance, it is found that most had financial planning with an average value of 4.16. The investment comes from creditors and equity. Product cost are regularly inspected and accounting records are made for all transactions with an average of 4.05. For human resource management, it is found that there are human resource management planning in the organization by paying salaries and wages of employees according to ability with an average of 3.99. In addition, the responsibilities of employees are clearly divided before work. With an average of 3.95. In production or service, it is found that enterprises have surveyed the needs of customers before beginning production or service. The amount of raw materials or products are controlled with an average of 4.12. In addition, new raw material sources are also selected to prevent shortage of raw materials or products for sale and control the quality of production or service with the average value 4.07. For the internal factors that have the most effect on management of enterprises, it is found that they are knowledge and competency of the management with an average of 3.94 and knowledge of the employees with an average of 3.86, while the external factors that affect the management of most enterprises are found to be the number of competitors in the market with an average of 3.90.

CONCLUSION

The results of the study of the status of small and medium enterprises (SMEs) in the Andaman Triangle province (Phuket, Phang-Nga, Krabi) can be discussed as follows:

From the study of the status of small and medium enterprises (SMEs) in the Andaman Triangle province group (Phuket, Phang-Nga, Krabi) it found that the number of small and medium enterprises (SMEs) in the Andaman Triangle is 20,981 divided into 20,636 small enterprises (SE), and 345 medium enterprises (ME). The results from data collection from SMEs in the Andaman Triangle provinces group, it is found that SMEs are diverse (Heterogeneous group), most of which are single owner business and most of them are service businesses. The number of regular employees is less than 10 people. Most businesses have fixed assets ranging from 1–5 million baht or more. Average annual sales are an income of 1–5 million baht or more. The net profit per average sales per year is not more than 5–10 percent which is according to the Pickle and Abrahamson concept (Pickle, 1964).

Any business can be called a small business should have at least two from four characteristics including:

- 1. Independent Management and the manager or the business manager will be the owner of the business itself
- 2. Investment that is invested are private fund or from a small group of investors
- 3. The area of operation is at the local level where the business is located and where business owners and employees live.
- 4. The size of the business will be small comparing to large businesses in terms of sales, number of workers.

When considering management, it often experiences marketing problems because there are no marketing activities and market surveys. Most of the financial problems are investments from creditors and owners. In Human Resource Management, Salary and wage payments for employees are according to their ability.

In addition, there is a clear division of responsibilities for employees before work. In the production, there is a survey of customer needs before production or service provision and control the amount of raw materials or products that are for sale. In addition, new sources of raw materials are also selected to prevent shortage of raw materials or products for sale and the quality of production or service are controlled. The internal factors that have the most impact on enterprise management are the knowledge and competency of the management and knowledge of the employees. As for the external factors that have the most impact on the management of enterprises, it is found to be the number of competitors in the market which is consistent with the study of small and medium enterprises in Nava Nakorn Industrial Estate, Pathum Thani Province (Tengmuangpak, 2011). From the study, it is found that the factors contributing to the success of the company are marketing and sales department of the organization followed by the expertise of personnel and leadership in the organization's management, respectively.

Therefore, the small and medium enterprises of the Andaman Triangle Group have a management system that face the problems that affects the success of the business. Those problem are knowledge, ability of the executive or the owner of the business and the knowledge and competency of the employee.

Suggestions

Suggestions from research for the development of small and medium enterprises in the Andaman Triangle Province, it is found that the following actions should be taken.

Suggestions for practice

- 1. Entrepreneurs should integrate knowledge in science, technology and innovation, research and product development including continuous production improvement to extend the traditional industries to industrial groups, creating value that responds to the future of the world in the future.
- 2. The products should be studied and developed to be in accordance with the variety needs of the market including creating a unique identity or bringing Thai wisdom into the production and / or services.
- 3. The service sector and the creative economy industry group should be linked together.
- 4. Preparation should be arranged to support changes in climate and to be environmentally friendly.

Policy suggestions

- 1. The development of production processes should be promoted and supported for entrepreneurs to be able to rely on themselves.
- 2. The use of innovation should be promoted to emphasize to create features for Thai products.
- 3. The integration of domestic business network (Cluster) should be promoted
- 4. Entrepreneurs should be encouraged to choose to use domestic raw materials and to adjust raw materials to be consistent with the production process by creating interdependence within the entrepreneur group to reduce the import of raw materials.

Suggestions for further research

- 1. The comparative research should be conducted between the status of small and medium enterprises in the Andaman Triangle and developed countries with similar geographic and economic areas to be used as guidelines for the improvement and development of medium and small enterprises in the Andaman Triangle Provinces.
- 2. Operation research should be conducted about combining the industry group or cluster to improve the participation in problem solving and share real benefits.
- 3. The results from research should be used to develop a strategic plan to develop SMEs starting from SMEs in any province and expand the results.

Policy Recommendations

- 1. Local organizations should play a role in laying down rules and regulating the balance between resource users and local people, such as tourist attractions.
- 2. The government should address domestic political problems and security issues by giving confidence to both investors and tourists
- 3. Government support should be integrated seriously by clearing data and policy and getting easy access.
- 4. It should promote cultural heritage in order for older generation to gain knowledge and create value for businesses in the community and SMEs.

Limitations in research

- 1. This research was affected by the data obtained from the questionnaire. The general manager is 54.3%. Only 29.0% of the respondents were surveyed. It is believed that the research could be used as a strategic proposal for the purpose of the research.
- 2. Organizing forum comment of stakeholders who are attending the forum is still lacking with interest from the management of each agency. Some are merely delegates to those who do not have the authority to make policy decisions. Criticism is not clear in the policy either.

REFERENCES

- Department of Industrial Promotion Ministry of Industry. (2002). Industrial ministerial regulations re: Determination of number of employment and employment of small and medium enterprises. Retrieved from http://www.ratchakitcha.soc.go.th/DATA/PDF/00102303.PDF.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607–610.
- Manjaiarn, R. (2014). Small business operations. Bangkok: Saengchan Printing.
- Office of Small and Medium Enterprises Promotion (OSMEP). (2015). *Office of small and medium enterprises promotion: Definition of SMEs*. Retrieved from http://www.sme.go.th/Pages/Define.aspx.
- Organisation for Economic Co-operation and Development (OECD). (1997). *Globalization and small and medium enterprises (SMEs)*. Paris, France: Organization for Economic Co-operation and Development.
- Pickle, H. B. (1964). Personality and success: An evaluation of personnel characteristics of successful small business managers. United States: Small Business Administration Small Business Research Series.
- Rumakom, P. (1997). Small business administration. 5th Edition. Bangkok: Physics Center.
- Sato, Y. (2014). *Development of small and medium enterprises in the ASEAN economies*. Retrieved from http://www.jcie.org/japan/j/pdf/pub/publst/1451/9_sato.pd.
- Siriphatasophon, S. (2016). Competitive capacity and readiness of thai small and médiums enterprises for entering the ASEAN economic community. *Journal of the Association of Researchers*, 21(1), 9–33.
- Srisom, A. (2000). Strategies for creating SMEs. Bangkok: Nari Info.
- Tengmuangpak, C. (2011). Administrative factors affecting the success of small and medium enterprises in Nava Nakorn Industrial Estate Pathum Thani. Thesis. Eastern Asia University.

THE EFFECTS OF PRIVILEGE FUNDS ON PUBLIC WELFARE AND POVERTY IN SPECIAL DISTRICT OF YOGYAKARTA

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ABSTRACT

The objective of study is to analyze the effect of Privilege Funds on public welfare and poverty in Special District of Yogyakarta based on data from 2014 to 2016. This study uses intervening variables, namely capital expenditure and economic growth. Special District of Yogyakarta is chosen because it is the only province in Indonesia that receives Privilege Funds as a source of Regional Government Budget. The analytical method used is based on Partial Least Square which follows the structural equation model for testing hypothesis ($\alpha = 5\%$). The findings of study are privileged fund has a negative effect on capital expenditure but has a positive effect on economic growth, capital expenditure has a positive effect on public welfare but has a negative effect on poverty in Special District of Yogyakarta.

Keywords: Privilege funds, capital expenditure, growth, welfare, poverty.

INTRODUCTION

The current regional autonomy has been regulated based on Law Number 23 Year 2014. Special District of Yogyakarta (DIY) as an area that uses the system of monarchy, but Sri Sultan Hamangkubuwono IX and Sri Pakualam VIII do "Ijab Qabul" which states to merge into one of the territory of Republic Indonesia on September 5, 1945.

According to Law Number 13 Year 2012, Privilege Funds aims to maintain cultural heritage, preserve and create prosperity for the people of Yogyakarta. This Privilege Funds is used to cover five areas of affairs: the governor's and governor's vice governor's procedures, institutional sector, culture sector, land affairs sector, and spatial planning.

Sakir and Mutiarin (2016) stated that the implementation of the privilege budget policy is (1) the priority of the more dominant Privilege Funds for cultural affairs specifically in 2013 is 91.89%, 2014 is 71.62%, and in 2015 is 76.87%; (2) the quality of Privilege Funds expenditures that are not maximized from 2013 to 2015, in 2013 the budget absorption is 23.58%, 2014 is 64.88% and 2015 is 20.06%; (3) the interest of Privilege Funds does not have clear identification of output and outcome, so as not yet describe the development of Privilege Funds; (4) the perception of the stakeholder of privilege between the central government, Kasultanan, Pakualaman, the political elite, the community and the unequal owners of capital; (5) since 2013 until 2015, the impact of the Privilege Funds would not be enjoyed by the community maximally; in 2014, the highest DIY poverty rate in Java is 14.55%.

Privilege Funds is allocated for direct expenditure in preserving DIY privilege particularly in the field of culture. During the period 2013–2015, the culture sector is the area with the largest budget. To improve the public welfare and reduce the poverty rate of districts in DIY, the budgeted Privilege Funds should be allocated to capital expenditure with a greater percentage compared to personnel expenditure and goods and services expenditure.

Increased capital expenditures may have an impact on increasing public welfare and reducing poverty. If capital expenditures are used for development enhancement and improvements to public facilities such as schools, health centers, libraries, employment, it can increase public welfare and reducing poverty.

This study analyzes the effect of Privilege Funds on public welfare and poverty in Special District of Yogyakarta based on data from 2014 to 2016.

This research is important because research on Privilege Funds only exists in Special District of Yogyakarta which not much has been done, especially the effect on public welfare and poverty by using variables of economic growth and capital expenditure as an intervening variable.

LITERATURE REVIEW AND HYPOTHESIS

Agency Theory

Panda and Leepsa (2017) describe agency relations as contracts between principals and agents to carry out several services on their behalf that involve delegation as decision-making authority to agents. Agency theory is a theory that links principal relations with agents derived from economic, sociological and organizational theories. The relationship between principals and agents results in information asymmetry, because agents who are authorized by the principal have more information than principals.

Relating to this research agency theory is based on asymmetric decentralization between regions that receive Privilege Funds with regions that do not receive Privilege Funds, so that regions such as DIY that receive Privilege Funds get additional transfers from the central government. The additional transfer should be able to increase capital expenditure and economic growth so that it can improve the public welfare and reducing poverty if the use of these funds is efficient and effective.

The agency relationships in this study occurred between the central government with local governments, local governments with budget users, and budget users with the power of budget users. The central government as a principal provides Privilege Funds to local governments with the aim of preserving privilege and improving the public welfare in DIY.

Local governments have a role as a principal who gives Privilege Funds budget to budget users to implement privilege. However, budget users can also be a principal who give authority to use the Privilege Funds budget to the budget user proxy to spend the Privilege Funds budget.

In order that the use of the Privilege Funds does not deviate from its objectives, The Development Planning Agency at Sub-National Level is designated as a monitoring and evaluation function and the formation of the Privilege Funds Special Committee by the DIY Regional House of People's Representatives (DPRD DIY) for monitoring the implementation of the Privilege Funds.

Fiscal Decentralization

The fiscal decentralization aims to encourage the independence of regional governments in managing their governance. The granting of regional autonomy is no longer merely carrying out instructions from the center, but really has the freedom to increase creativity in developing regional potency and it is hoped that the local government will be more independent, reduce dependence on the central government and be able to increase public trust.

Local governments in carrying out their duties and authorities must make a plan of income and expenditure for a particular year called the Regional Income and Expenditure Budget. However, regional revenues cannot fully to finance development. Therefore, the transfer of funds from the center becomes a source of revenue to support development.

According to Law Number 23 of 2014, the provision of financial resources in the form of transfer revenues, namely the Balancing Fund; Special Autonomy Fund for Nanggroe Aceh Darussalam, Papua and West Papua; Privilege Funds for DIY; and Village Funds.

According to Agustinus (2015), fiscal decentralization can be effective because there are three components, there are (1) the existence of autonomy and adequacy in revenue (revenue autonomy and adequacy); (2) autonomy in expenditure autonomy; the existence of privilege for borrowing privilege.

According to Law Number 13 of 2012, the government provides funding in the framework of organizing the affairs of DIY privilege in the form of Privilege Funds which are allocated for and managed by the DIY regional government which allocates and distributes them through the transfer mechanism to the regions.

According to the Minister of Finance Regulation Number 124 /PMK.07/2015, privileges funds are funds originating from the Indonesian Budget allocated to fund privilege authority and are part of funds transfer to the area (Adam, Pattaling, Sumai, & Obei, 2019).

Capital Expenditure

According to Statement of Indonesian Government Accounting Standards Number 2 concerning Budget Realization Report, capital expenditure includes spending on land, buildings and buildings, equipment, and intangible assets. Shopping accounting is prepared in addition to fulfilling accountability in accordance with provisions, can also be developed for control purposes for management.

According to Asiri *et al.* (2016) and de Vita and Kyaw (2009), capital expenditures in general are allocated to build infrastructure which is further expected to increase the economy and stimulate the private sector to invest.

Capital expenditure will be allocated to fund development activities and this activity will lead to demand for goods and services (Badrudin, 2017). Privilege Funds was transferred by the central government will be spent in accordance with programs and activities.

Budget users who are responsible for the use of Privilege Funds for shopping, namely the Government Administration Bureau as Budget User for the procedures for the position of Governor and Deputy Governor; Organization Bureau as Budget User in field organizational; Department of Culture as Budget User in the field of culture; and the Office of Land Sector and Planology as Budget Users in the field of land sector and planology.

Economic Growth

Local governments need to pay attention to economic growth as an instrument in encouraging economic development so that in the end they can achieve effective poverty reduction goals and improve public welfare. With the existence of economic growth, it is expected that the income of the public as the owner of the factor of production will also increase.

Suwandi and Warokka (2013) stated that rapid economic growth must sacrifice (trade off) equitable distribution of income, rapid growth occurs when the share received by the owner of capital is greater than the share received by the owner of the workforce to increase savings for investment and growth with distribution emphasizes increasing productivity and foreign investment to increase national.

According to Suwandi and Warokka (2013), economic growth was achieved by three factors, namely the increase in stable inventory, technological development, and the efficient and effective use of technology.

According to Badrudin and Kuncorojati (2017), economic growth is one measure of the success of economic in an area. One form of the success of economic is the development of infrastructure and facilities that support the activities of local governments.

Economic growth is the change in Gross Regional Domestic Product (GRDP) per year which is expressed in percent units. Therefore, to calculate the economic growth rate of a region must know the value of its GRDP. According to Pananrangi (2012), it is very important that GRDP growth continues to increase every year so that economic progress will occur and will eventually be reflected in real terms in community income.

Public Welfare and Poverty

Economic growth should provide direct benefits for increasing income. Increased income will increase the allocation of household expenditure for nutritious food and education, thus increasing the quality of life of the public. Public welfare shows a measure of development outcomes in achieving a better life.

The goal of national development is to realize a just and prosperous society. A just and prosperous society is the condition of society that is achieved with the concept and process of inclusive development. Inclusive economic development is economic development that is capable of realizing economic growth (pro growth) accompanied by pro jobs (employment), pro poor (reducing poverty), and pro equity (equal distribution of income), pro environment (not damaging the environment).

This means that development is oriented towards achieving certain economic growth rates while still considering employment by reducing the number of open unemployment, reducing the ratio of the poor, reducing the ratio of gini, and environmentally oriented development (Badrudin, 2017).

Poverty is a problem for every nation whose handling is carried out by fulfilling the basic rights of the community through inclusive development. Poverty is indeed a problem for every country, both developed and developing countries. The conditions of poverty are at least caused by low levels of education, low quality of health, limited employment, difficult and isolated demographic conditions and political instability.

According to Sumaryoto (2016), the core problem of poverty lies in the so-called poverty trap which consists of poverty itself, isolation, vulnerability, and powerlessness. The United Nations Development Program (UNDP) defines poverty as a condition of income shortages and economic difficulties. However, poverty is also seen as a situation where there is a lack of access to education, health, and influence the political process and other factors that are important to society.

Larasati (2016) examined the implementation of the periodic Privilege Funds at the Legal Bureau of DIY Secretariat. The results show that the Privilege Funds in the Legal Bureau of DIY Secretariat has been implemented well even though the realization of the funds has not been fully optimal.

Nuriyatman (2016) examines the implementation of decentralization in DIY based on Act Number 13 of 2012 concerning specialties of Special District of Yogyakarta.

The results show that there are still technical constraints in the absorption of the budget, namely in terms of transfer of Privilege Funds.

According to Kartika (2016), there are four constraints in managing Privilege Funds, namely the limited time to implement, the details of the meaning of the privatization, the tightness of regular government activities, and the limited number of human resources.

However, the government has five efforts in order to optimize the Privilege Funds, namely limiting tasks and functions, preparing plans early, preparing proposed details of regulation, adjusting proxy for budget users, and applying for adjustments to the session or terms.

According to Fadlan (2016), there are various indicators of Privilege Funds needs assessment, so that they do not harm the central government as the giver, and or the DIY government as the recipient. Privilege Funds for DIY does not conflict with the constitution, because the granting of privilege status by the central government must be followed by additional fiscal decentralization.

According to Pradhani (2016), the absence of rules governing all cultural affairs in DIY is a matter of privilege, but indirectly with the funding of programs and activities of all cultural affairs with Privilege Funds, except routine

expenditure, shows that cultural affairs in DIY after the enactment of Law Number 13 of 2012 concerning the Privilege of the Special District of Yogyakarta is a matter of privilege.

According to Sakir and Mutiarin (2016), not all stakeholders understand that privilege programs are basically also part of the Regional Development Program, unpreparedness and concern from Budget Users and Budget Users Proxy related to the procurement of products, especially for districts.

So far, this is considered a risky activity for the procurement committee as well as officials who make commitments, lack of human resources as executors and financial management of Privilege Funds, program planning, activities and budgets do not reflect the needs and capacities of Budget Users and Budget Users Proxy of each budget authority privileges, and the participation of Special District of Yogyakarta public in the implementation of privilege authority has not been involved since the beginning of the formulation of programs, activities, and budgeting.

HYPOTHESIS DEVELOPMENT

Privilege Funds consists of five fields of authority, that is the fields of culture, institutional fields, fields of procedures for filling positions, land and spatial planning. Privilege Funds allocated to the fields of institutional, cultural, land and spatial planning, during the 2014–2016 period experienced a significant increase. Privilege Funds should be used to provide more public facilities related to spatial planning, land, culture and institutions.

The higher the Privilege Funds given by the central government, the higher the capital expenditure of the regional government, because the DIY regional government gets an additional budget to spend in order to carry out the privilege and public welfare.

Sakir and Mutiarin (2016), Larasati (2016), and Nuriyatman (2016) stated that the absorption of Privilege Funds was not optimal because of constraints to the absorption of Privilege Funds, such as lack of human resources as implementers and management Privilege Funds and the details of the meaning of the Privilege have not been detailed.

Hypothesis 1: Privilege Funds has a positive effect on capital expenditure in districts in DIY.

Economic growth is one measure of the success of economic in an area. One form of economic development is the development of infrastructure and facilities and infrastructure that support the activities of local governments.

Privilege Funds will be allocated to fund five areas of privilege authority, Privilege Funds become a new source of income for DIY development, especially in the five privilege authority matters. This will have an impact on development that increases the product, especially in the field of culture to improve the tourism sector. An increase in the tourism sector which is the leading revenue can increase economic growth in districts in DIY.

Sakir and Mutiarin (2016) state that Privilege Funds are less than optimal in increasing economic growth because the translation of the meaning of Privatization according to the details has not been detailed.

According to Kartika (2016), although the absorption of Privilege Funds is less than optimal, the government has five efforts in order to optimize the Privilege Funds, namely limiting tasks and functions, preparing plans early, drafting details of Perdais, adjusting KPA, and applying for adjustments to the session or terms.

According to Fadlan (2016), granting privilege to DIY can increase economic growth due to the provision of privilege followed by additional in the form of Privilege Funds.

Hypothesis 2: Privilege Funds has a positive effect on economic growth in districts in DIY.

Capital expenditure will be allocated to fund development activities. The development can be in the form of land; inventory and machinery; buildings and buildings; roads, irrigation and networks; and other public facilities so as to facilitate community accessibility in daily activities and to support community economic activities.

If the public's economic activities are not supported by the local government, economic growth will not increase. According to Pananrangi (2012), it is very important that GRDP growth continues to increase every year so that economic progress will occur and will eventually be reflected in real terms. The increasing in capital expenditure will increase economic growth.

According to Badrudin and Kuncorojati (2017), an increase in capital expenditure can have an impact on development that increases the production of goods and services, so that economic growth can increase.

Meanwhile, according to Asiri et al. (2016) and de Vita and Kyaw (2009), capital expenditures in general are allocated to build infrastructure which is further expected to increase the economy and stimulate the private sector to invest.

The allocation of capital expenditure that is used for development and improvement of infrastructure and public facilities can increase investment in the form of assets and fresh funds. The increasing of investment can improve the quality of public services.

Hypothesis 3: Capital expenditure has a positive effect on economic growth in districts in DIY.

The increasing economic growth also provides direct benefits to increase income. The increasing income will increase the allocation of household spending for nutritious food and education, so as to improve life. The level of economic growth of a country shows the level of prosperity of public. In addition to national income is also the most commonly for measuring public welfare.

Sirag, Nor, Abdullah, and Karimi (2016) stated that development and economic growth must produce improvements in the real form of community welfare by focusing on improving living standards, education and health. If economic growth is good, then the level of community income will also increase.

The increase in income that occurs increases the life needs of a better community, this shows that the level of community development is increasing.

Badrudin and Kuncorojati (2017) has a different statement, the higher economic growth actually decreases the public welfare, because economic growth only focuses on exclusive development.

Hypothesis 4: Economic growth has a positive effect on public welfare in districts in DIY.

Economic growth can also illustrate the increase in economic activity which is then expected to reduce poverty. The GRDP per per capita growth is considered more reflective of the changing conditions of public's economy or progress of the level of public welfare.

According to Pananrangi (2012), it is very important that GRDP growth continues to increase every year so that economic progress occurs describes people's income. The meaning of increasing in economic growth is income of the owner of the factors of production will also increase, so as to reduce to poverty.

Badrudin and Kuncorojati (2017) stated that the higher of economic growth the higher of poverty rate. The increasing number of poverty due to economic growth is not accompanied by development and improvement of public facilities for the poor.

Hasan and Zikriah (2010) stated that the increase in GRDP gives an impact on poverty. The increase in GRDP indicates the ease of the public to carry out economic and social activities.

Hypothesis 5: Economic growth has a negative effect on poverty in districts in DIY.

RESEARCH METHOD

The population that will be the object of this research is the realization of Privilege Funds in five fields as a whole from the Field of Culture, Land Sector, Planology, Institutional Fields and Procedures for Filling Governors and Deputy Governors and budgets in districts in DIY during 2014–2016.

The sampling in this study uses purposive sampling method. Data sources of this research are 1) Data Realization of Regional Income and Expenditure Budget on district in districts in DIY and Privilege Funds Performance Reports during the 2014–2016.

The data obtained is the realization of Privilege Funds and capital expenditure of Regional Government Budget in districts in DIY; 2) Data on economic growth in districts in DIY during the 2014–2016; and 3) Data on public welfare in this research was measured using Human Development Index (HDI) and data on poverty was measured using poverty ratio during the 2014–2016.

The analysis model uses the Partial Least Square (PLS) which to obtain latent variable values for predictive purposes with the analysis model are inner model, outer model, and weight relation estimates the case value of the latent variable.

FINDINGS

Privilege Funds have the lowest realization value of Rp.4,125,771,950 in Sleman Regency in 2014, the highest realized value of Rp.493,501,137,133 in the City of Yogyakarta in 2016, and the average realization value in 2014–2016 was Rp85,418,234. 747.

The capital expenditure variable has the lowest realization value of Rp.127,289,721,491 in Gunungkidul Regency in 2014, the highest realized value was Rp.426,782,827,409 in Sleman Regency in 2016, and the average realized value in 2014–2016 was Rp.274,054,113.593.

The variable of economic growth has the lowest growth rate of 4.54% in Gunungkidul Regency in 2014, the highest growth rate of 5.30% in Sleman Regency in 2014, and the average growth rate in 2014–2016 of 4.97%.

Based on Table 1, it appears that the HDI has the lowest value of 67.03 in Gunungkidul Regency in 2014, the highest value of 85.32 in the City of Yogyakarta in 2016, and the average value of 76.54. Poverty Ratio has the lowest value of 7.70% in Yogyakarta City in 2016, the highest value is 21.73% in Gunungkidul Regency in 2015, and the average value is 14.40%.

Table 1
Descriptive Statistics

Variable	Minimum	Maximum	Mean	Standard Deviation
Privilege Funds (Rp)	4,125,771,950	493,501,137,133	85,418,234,747	159,032,101,004
Capital Expenditure (Rp)	127,289,721,491	426,782,827,409	274,054,113,593	78,842,307,599
Economic Growth	4.54	5.30	4.97	0.23
Human Development Index (HDI)	76.44	85.32	77.31	0.86
Poverty Ratio (%)	13.10	15.03	14.40	0.90

Based on Table 1, the lowest realization of Privilege Funds in Sleman regency actually has the highest realized capital expenditure value and has the highest GRDP growth rate in DIY.

In contrast, the highest realized value of the Privilege Funds, namely the City of Yogyakarta, has a lower realized capital expenditure and GRDP growth rate than the Sleman district.

Thus it can be said that the increase in Privilege Funds may not necessarily increase the realization of Regional Government expenditure. The increase in districts capital expenditure of Regional Income and Expenditure Budget in DIY was caused by an increase in the Balancing Fund and Village Funds.

Evaluation of Goodness of Fit Model to Outer Model

Indicator weight value for Human Development Index and Poverty Ratio is significant or less than 5%. This shows the measurement model to test the construct in order to know the ability of the instrument to measure what should be measured using indicator weight is significant.

Human Development Index as an indicator to measure public welfare variable and Poverty Ratio as an indicator to measure poverty variable is indicated by the results of the outer weight whose results show <0.001.

The variables in this study have indicator weight values for all variables, namely the exogenous variable of Fund Privilege, intervening endogenous variable of capital expenditure, economic growth, endogenous variable of public welfare as measured by HDI and poverty as measured by PR of significance value <0.001.

Table 2
Convergent Validity Value for Variable of Public Welfare

Indicator	Loading Value	p-Value	Result
Human Development Index	0.919	< 0.001	Valid
Poverty Ratio	-0.919	< 0.001	Valid

The positive mark (+ 0.919) on coefficient of loading factor HDI shows that the HDI contribution toward public welfare variable goes along with direction. It means, if HDI contribution rises so the value of public welfare variable rises, on the contrary.

If the HDI contribution descends so the value of public welfare descends. The negative mark (-0.919) on coefficient of loading factor PR shows that the contribution PR toward public welfare is in different direction. It means, if PR contribution rises so the value of public welfare variable descends, on the other hand, if PR contribution descends so the value of public welfare rises.

Evaluation of Goodness of Fit Model to Inner Model

The inner model in this research will be fit (Table 3) if the p-value of Average Path Coefficient (APC) and Average *R-Squared* (ARS) are <5%, and the Average Variance Inflation Factor (AVIF) value is <5 (Srinita, 2018).

The inner model will be calculated for the Goodness of Fit based on the R^2 value of each endogenous variable which is shown in Figure 1 (Stone-Geisser *Q-Square*). So if the R^2 value of capital expenditure variable $(R1^2)$ of 0.12, economic growth $(R2^2)$ of 0.57, public welfare $(R3^2)$ of 0.80, and poverty $(R4^2)$ of 0.91, then:

$$Q^2 = 1 - (1 - RI^2) (1 - R2^2) (1 - R3^2) (1 - R4^2)$$

- = 1 (0.88)(0.43)(0.20)(0.09)
- = 1-0.0083952
- =0.9931888

Table 3
Result of Goodness Fit Model

Result	p-Value	Criteria	Result
APC = 0,647	<0,001	<0,05	Accepted
ARS = 0,601	<0,001	<0,05	Accepted
AVIF = 1,000		<5, ideally <3	Accepted

Table 4
The Results of Hypothesis Testing

Hypothesis	Relationship Variable	Path Coefficient	p-Value	Prediction	Finding	Result
H_1	DK => BM	-0,34	0,06	+	-	Rejected
H_2	$DK \Rightarrow PE$	0,40	0,03	+	+	Accepted*)
H_4	$BM \Rightarrow PE$	0,65	<0,01	+	+	Accepted*)
H_4	$PE \Rightarrow KM$	0.89	<0,01	+	+	Accepted*)
H_5	$PE \Rightarrow MS$	-0,33	<0,01	-	-	Accepted*)

Note: DK: Privilege Funds; BM: Capital Expenditure; PE: Economic Growth; KM: Human Development Index; and MS: Poverty Ratio

^{*)} Significant because the value *p-value* \leq 5%

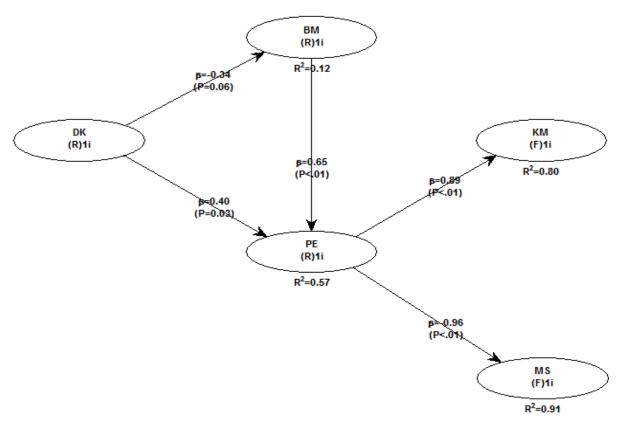


Figure 1. The output of hypothesis testing

Note: DK: Privilege Funds; BM: Capital Expenditure; PE: Economic Growth; KM: Human Development Index; and MS: Poverty Ratio

DISCUSSION

Table 4 shows that Privilege Funds variable do not affect capital expenditures as indicated by a *p-value* of 0.06 greater than 0.05. Thus, the H_I is rejected.

The results of the study support to Sakir and Mutiarin (2016), Larasati (2016), and Nuriyatman (2016) which states that the absorption of Privilege Funds is not optimal due to constraints on the absorption of Privilege Funds.

According to Sakir and Mutiarin (2016) these constraints are in the form of the implementation of the Privilege Funds budget policy which still prioritizes cultural affairs, in 2014 it was 91.89%, in 2015 it was 71.62% and in 2016 was 76.87%, Privilege Funds the capital expenditure is very low; and the quality of Privilege Funds spending which is not maximized since 2014 to 2016, in 2014 budget absorption was 23.58%, in 2015 it was 64.88% and in

2016 it was 20.06% due to lack of human resources as executors and financial management Privilege Funds and not yet detailed translation of meaning privilege according to the Privilege Funds Regulation.

Table 4 shows that Privilege Funds variable has a positive effect on economic growth as indicated by a *p-value* of 0.03 smaller than 0.05 and the path coefficient value of 0.40 which has a positive number. Thus, the H_2 is accepted.

The results of the study not support to Sakir and Mutiarin (2016) which states that Privilege Funds have not been optimal in increasing economic growth because not all stakeholders understand that Privilege Programs are basically also part of the Development Program, uncertainty and concerns of Budget Users and Budget User Proxies related to procurement of products, especially in districts.

The interests of the Privilege Funds do not yet have a clear identification of outputs and outcomes, so can not describe the development of Privilege Funds, perceptions of stakeholders between the central government, Kasultanan, Pakualaman, political elites, society and the owners of capital that are not the same, from 2014 to 2016 the impact of the Privilege Funds has not been enjoyed by the community to the fullest, in 2014 the DIY poverty rate was the highest in Java, which was 14.55%.

The results of the study support to Kartika (2016) which states that although the absorption of Privilege Funds is less than optimal, the government has five efforts to optimize the Funds Privilege, namely limiting tasks and functions, preparing plans early, preparing proposals for details of Privilege Funds Regulations, adjusting Budget User Proxies, and applying for adjustments the term, so that Privilege Funds allocations can increase economic growth.

The results of the study support to Fadlan (2016) which states that granting privileges to DIY can increase economic growth due to the provision of privilege followed by additional fiscal decentralization in the form of Privileges Funds. Thus the allocation of Privilege Funds can be optimized for economic growth in districts in DIY.

Table 4 shows that capital expenditure variable has a positive effect on economic growth as indicated by *p-value* <0.01 less than 0.05 and path coefficient value of 0.65 which has a positive number. Thus, the H_3 is accepted. The results of the study support to Pananrangi (2012), Asiri *et al.* (2016), de Vita and Kyaw (2009), and Badrudin and Kuncorojati (2017).

According to Pananrangi (2012), it is very important that GRDP growth continues to increase every year so that economic progress will occur and will eventually be reflected in real terms. The increasing in capital expenditure will increase economic growth.

According to Asiri *et al.* (2016) and de Vita and Kyaw (2009), capital expenditures in general are allocated to build infrastructure which is further expected to increase the economy and stimulate the private sector to invest.

The allocation of capital expenditure for development infrastructure and public facilities can increase investment in the form of assets and fresh funds. Increased investment is expected to improve public services. The development infrastructure and public facilities can spur optimal economic growth.

Table 4 shows that economic growth variable has a positive effect on the public welfare as indicated by the *p-value* <0.01 less than 0.05 and the path coefficient value of 0.89 which has a positive number. Thus, the H_4 is accepted. The result of the study not support to Badrudin and Kuncorojati (2017).

Table 1 shows the period after the use of Privilege Funds to improve public welfare as measured by the HDI indicator. The increasing income will increase the allocation of household expenditure for nutritious food and education, so as to improve life.

The result of the study support to Sirag *et al.* (2016) which stated that development and economic growth must produce improvements in the real form of public welfare by focusing on improving living standards, education and health. This means, the higher economic growth, the higher public welfare in districts in DIY.

Table 4 shows that economic growth variable has a negative effect on poverty as indicated by the *p-value* <0.01 less than 0.05 and the path coefficient value of -0.96 which has a negative number. Thus, the H_5 is accepted. This means that the increasing economic growth will decrease the poverty rate in districts in DIY. The results of the study not support to Badrudin and Kuncorojati (2017).

Table 1 shows the period after the use of Privilege Funds can reduce the probability rate as measured by the Poverty Ratio. The results of the study support to Hasan and Zikriah (2010), which states that an increase in GRDP has an impact on poverty, increasing GRDP indicates the ease of the public to carry out economic and social activities.

CONCLUSION

The Privilege Funds does not affect capital expenditure. This means, the higher Privilege Funds allocation has not been able to increase capital expenditure in districts in DIY. The Privilege Funds has a positive effect on economic growth. This means, if Privilege Funds allocation increase, economic growth in districts in DIY will increase.

The capital expenditure in DIY has a positive effect on economic growth. This means, if capital expenditure increase, it can increase economic growth of districts in DIY, because capital expenditure is used for the development infrastructure and public service facilities that can increase economic activity, thus spurring increasing public income.

The economic growth has a positive effect on public welfare in districts in DIY. This means, if economic growth increase, it can improve public welfare in districts in DIY. The economic growth has a negative effect on poverty in districts in DIY. This means, if economic growth increase, poverty in districts in DIY will decrease.

REFERENCES

- Adam, S., Pattaling, Sumai, S., & Obei, M. (2019). Inter-stakeholders communication in the implementation of village fund programs: An experience in Gorontalo Province, Indonesia. *Journal of Management and Sustainability*, 9(1),132–140.
- Agustinus, J. (2015). Accountability perspective: Implementation and reporting on spending fund of Papua special autonomy. *Information Management and Business Review*, 7(2), 79–86.
- Asiri, A. A. A., Masinambow, V. A. J., & Wauran, P. C. (2016). Pengaruh belanja modal dan investasi swasta terhadap kesejahteraan masyarakat melalui kesempatan kerja di Provinsi Sulawesi Utara Periode 2003–2013. *Jurnal Berkala Ilmiah Efisiensi*, 16(3), 334–347.
- Badrudin, R. (2017). Ekonomika otonomi daerah. Edisi Kedua. Yogyakarta: UPP-STIM YKPN.
- Badrudin, R., & Kuncorojati, I. (2017). The effect of district own-source revenue and balance funds on public welfare by capital expenditure and economic growth as an intervening variable in Special District of Yogyakarta. *Jurnal Manajemen dan Kewirausahaan*, 19(1), 54–59.
- de Vita, G., & Kyaw, K. S. (2009). Growth effects of fdi and portfolio investment flows to developing countries: A disaggregated analysis by income levels. *Applied Economics Letters*, *16*(3), 277–283.
- Fadlan, H. (2016). Kebijakan mengenai ketidakpastian besaran prosentase dana keistimewaan bagi Daerah Istimewa Yogyakarta. Skripsi. Yogyakarta: Universitas Gadjah Mada.
- Hasan, T. I. B., & Zikriah. (2010). Pengaruh belanja modal pemerintah dan produk domestik bruto terhadap penduduk miskin di Aceh. Jurnal SAINS Riset, 1(3)18–26.
- Kartika, D. (2016). Analisis kesiapan pengelolaan dana keistimewaan Daerah Istimewa Yogyakarta tahun anggaran 2013. Skripsi. Yogyakarta: Universitas Gadjah Mada.
- Larasati, H. N. (2016). Implementasi dana keistimewaan periode tahun 2013–2015 di Biro Hukum Sekretariat Daerah Daerah Istimewa Yogyakarta (Setda DIY). Skripsi. Surakarta: Universitas Sebelas Maret.
- Nuriyatman, E. (2016). Implementasi desentralisasi di Daerah Istimewa Yogyakarta (DIY) berdasarkan Undang Undang nomor 13 tahun 2012 tentang keistimewaan Daerah Istimewa Yogyakarta. Jurnal Pasca Sarjana Hukum, 4(2), 18–26.
- Pananrangi, A. I. (2012). Pengaruh pertumbuhan ekonomi terhadap tingkat kemiskinan. *Jurnal Plano Madani*, 2(1), 29–38.

- Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian Journal of Corporate Governance*, *10*(1), 74–95.
- Pradhani, S. I. (2016). Pengaturan pengelolaan keuangan urusan kebudayaan sebagai urusan pemerintahan konkuren dan urusan keistimewaan di Daerah Istimewa Yogyakarta. Tesis. Yogyakarta: Universitas Gadjah Mada.
- Sakir & Mutiarin, D. (2015). Kebijakan anggaran dana keistimewaan Daerah Istimewa Yogyakarta. *Jurnal Ilmu Pemerintahan dan Kebijakan Publik*, 2(3), 462–492.
- Sirag, A., Nor, N. M., Abdullah, N. M. R., & Karimi, M. (2016). Does high public health expenditure slow down economic growth? *Journal of Applied Economic Sciences*, 11, 1(39), 7–17.
- Srinita. (2018). Factors affecting the food security and community welfare of farmer households in Sumatera, Indonesia. *World Journal of Science, Technology and Sustainable Development*, 15(2), 200–212.
- Sumaryoto. (2016). The influence of regional revenue on government investment and its implication to the regional economic growth. *Journal of Applied Economic Sciences*, 11, 8(46), 1552–1568.
- Suwandi, & Warokka, A. (2013). Fiscal decentralization and special local autonomy: Evidence from an emerging market. *Journal of Southeast Asian Research*, 1–14.

ADVERTISING KIDAL TEMPLE AS A TOURISM SITE IN THE DISTRICT OF MALANG THROUGH THE CREATION OF HAND PAINTED BATIK OF GARUDEYA STORY

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ABSTRACT

Kidal Temple is one of many historical tourist attraction in the District of Malang. The Government opened this temple as an educational tourist attraction which can be visited by everyone. However, only a small number are interested to visit this temple anymore, concerned to learn reliefs passed down by ancestors as the way to preserve it. Visitors mainly are academicians who come to carry out research. Not many people knows, this temple is the oldest temple in East Java. There is a relief of Garudeya story which contains a high philosophical value which is a great character education. Considering this problem, the author would like to advertise Kidal Temple as an educational tourist attraction through the creation of hand painted batik which uses Garudeya story as the main inspiration. Through the creation of this hand painted batik and also the exhibition of the result, hopefully it would promote Kidal Temple as well as the important relief on it. Thus, the next generation would be interested in it and concerned to learn it as a way to preserve this artefact which was passed down by the ancestors.

Keywords: Advertising, tourism, kidal temple, hand painted batik, garudeya.

INTRODUCTION

The District of Malang is an area in Indonesia which has many tourist attraction with historical value such as temples. There are 11 temples, because the area was the capital area of Singosari Kingdom. A temple which was the oldest heritage of Singosari Kingdom in the District of Malang is Kidal Temple. It is located in Rejokidal Village, Tumpang Region, District of Malang, particularly 20 km to the east of Malang City. The government of Malang District established Kidal Temple as an educational tourist attraction and also a cultural tourist attraction which can be accessed by anyone in the town. Culture tour includes tourism sites which are products of local cultural art, such as local customs, religious rituals, social life order, and historical artefact (Atmojo, 2008). In this temple, there is a relief called Garudeya. This relief tells a story of a garuda that freed its mother from slavery by fulfilling a request. The request was to give holy water of Amerta to a dragon. As this relief conveys a philosophy about freedom from slavery, hopefully people would refer to Kidal Temple as they apply and teach moral values which is embodied in the story of Garudeya.

Kidal Temple as a tourist attraction in the District of Malang is supposed to have huge potential to bring on a number of tourists, both domestic and international. This phenomenon surely would affect on the increasing of locals' income around Kidal Temple as well as regional income. Geographical factor of Malang District, that is having a lot of artificial and natural tourism, only helps bringing tourists to visit Kidal Temple as they vacationing number of tourist attraction in the area. The number of visitors in Kidal Temple should be increasing year by year, since it is not only a family holiday venue, but also a media of education of Indonesia's history.

In the contrary, only a few people visit Kidal Temple. Couples of academician come time to time to conduct research related to this temple. It is supposed to be a wonderful holiday destination for families. Not only adults, but also children and younger generations should learn and understand the Indonesian historical sequence of events as well as its cultures. Thus hopefully by understanding it, it will spark up people's sense of belonging upon the history of our own history, and also people's concern to reserve the treasured heritage.

Considering this problem, researcher is interested to advertise Kidal Temple as tourism destination through the creation of hand painted batik about the story of Garudeya's life. This hand painted batik would be used as an educational media as well as advertisement of the temple in schools. It will also be exhibited publicly to tell the story in a wider scale, thus people will be interested in the story of Garudeya which is on the wall of Kidal Temple. Hopefully, more people will visit this temple, be it an easy holiday, or serious learning of reliefs on the temple's wall.

LITERATURE REVIEW AND HYPOTHESIS Kidal Temple

Kidal Temple is located in Rejokidal Village, Tumpang Region, District of Malang. It is a Hindu temple of Singosari Kingdom and an oldest worship temple in East Java. Kidal Temple was built to honor King Anusapati in 1248 so that the King would have glory as Syiwa. Throughout the time, this temple had been restored couples times by Dutch Government and also Indonesian Government. Physical restoration had been done by Indonesian Government in 1986-1988 as a Project of Historical and Ancient Heritage Restoration and Maintenance in East Java (Turaeni, 2015).

The architecture of this temple possesses the characteristics of East Javanese temples. The material of this temple is andesite stones with vertical geometric dimension. The temple stands 10.8 meters long, 8.36 meters wide, and 12.26 meters tall. Outside the temple, there are piles of stone which stand as a barrier enclosing it. Meanwhile, inside there is a statue of God Shiva, 1.23 meters tall, which is in Royal Tripical Institute, Amsterdam at the moment. The temple's body stands on a base (batur) which is 2 meters high. The base of this temple was made in stairs. On the left and right of the first step there is a low angular wall that enclose the sides of the step and some part in front of it. Sculptures of medallion lining up along with floral and tendrillar borders decorate the base on all sides. On the left and right side of every inner corner of the steps as well as each protruding angle, there is a sculpture of an animal that looks like a lion sitting down like a person which one hand is raised. These statues look like holding up the upper corner of protruding angle on the base of the temple (Sedyawati, 2010).

Above the entrance there is a head of Kala which observe and guarding the temple. The entrance of the temple is facing west, complimented by a chamber showing a decoration of Kalamakara (a head of Kala) upon the threshold. Its hand is in the position of threatening (mudra). On the sides of the door way, there is a small chamber along with a shape of roof which was used to put statue. Upon the thresholds of these chambers there are Kalamakara, too. The roof of Kidal Temple is in rectangular shape in three levels, narrowing up. Instead of pointed, the top of Kidal Temple roof is a rectangular space which is quite wide. The top of the roof is not complimented by ratna or statues, but pretty plain. The sides of each level is decorated by floral and tendrillar carvings (Turaeni, 2015).

Outside the temple, east, north and south sides, there are reliefs of a garuda head which tells the story of Garudeya. Garudeya is a story carved on the body of this temple. This relief is a mandate from King Anusapati in order to ruwat (a Javanese ritual) his mother, Kendedes. The myth of Garudeya is drawn in three panels on the foot of the temple. These three panels of Garudeya were carved on the pilaster of Kidal Temple. The pilaster is in a center sides of the temple's base, particularly on the south, east and north sides. Dwi Cahyono, an archeologist, wrote in his personal account that Garudeya story is closely related to Samodramantana or Amretamantara stories. Amretamantara is an episode in the story of Adiparwa, which is the first part of Mahabrata series. The story tells about Viyasa family, especially genealogical story of Viyasa (Byasa) along with his two wives, Winata and Kadru, and their dramatic events surrounding their offspring. This story is one of Hindu mythologies, which contains a moral value about slavery freedom with Hindu temple in the background.

Relief Garudeya

Garudeya relief tells a story of a feud between the descendants of Resi Viyasa (Byasa), which was a battle between a garuda bird (Winata's offspring) and 100 dragons (Kadru's offspring). According to the request of each wife who could not bear any child, Resi Viyasa gave them three eggs each to hatch. However, only one successfully hatched, it was an anthropomorphic creature: a half man and half bird, named Garudeya. Meanwhile, a hundred eggs owned by Kadru was hatched as snakes. This story is written in the second part of Adiparwa Scripture which also tells stories about Pandawa and Kurawa's grandfather, Resi Viyasa, and also the birth and childhood of Bharata's offspring (Zoetmulder, 1974).

The main point of this story is an effort to free Garudeya's mother who was enslaved by the dragons and Kadru. This story basically delivers moral value of freeing ourselves from slavery (colonization) and grasping freedom (independence). Garudeya's mother would be freed by Kadru and the dragons in the price of Amerta water which was obtained from the gods. Wisnu was willing to lend Amerta water in one condition: Garudeya must be his mount (Wardani, 2013). After receiving and handing Amerta water to the dragons, Garudeya asked the dragons to wash themselves first. As they clean themselves, Indra took Amerta water. The dragons were sad, and licked the grass on where Amerta water dripped. Thus, their tongues were sliced. Garudeya managed to free his mother and left the dragons as his mother was freed from their slavery. After that, Garudeya fulfill his promise to Wisnu to be his mount.

Relief of Garudeya story was carved on every sides of the temple's foot. The drawing of the relief is as followed:

- 1. First panel in the south side of the temple: Garudeya is portrayed in the position of crouching down, his right leg is bend and kneeled down. Above his head there are three dragons. The dragons are on a lotus flower. The dragons' tails are hanging down and held by Garudeya. This panel tells about Winata and Garudeya, who lived as Kadru and 100 dragon-sons' slave. Garudeya's job was to babysit Kadru's snake-sons. Winata and her son was enslaved by Kadru family, because he was cheated and lost in the bet of guessing the color of Uchaiswara horse which emerged from milky ocean (samodra/ksirarwana). Honoring the bet, the loser must be the slave of the winner (Wardani, 2013).
- 2. Second panel in the east side of the temple: Garudeya is portrayed in the position of crouching down, his right leg is bend and kneeled down. His right hand is holding a bunch of grass, and on his head there is Amerta water in a jar (Kamandalu). Garudeya put his life in the line as he struggled to get Amerta water, Wisnu was almost defeated. Eventually wisnu was willing to lend the water to Garudeya in one condition: Garudeya must be his ride (Santiko, 2015).
- 3. Third panel in the north side of the temple: Garudeya is portrayed in the position of crouching down, his right leg is bend and kneeled down. His right hand is raised and holding a round object. On his head, a woman sitting on a lotus flower. Her left leg is folded in, while her right leg is hanging down and held by Garudeya's right hand. On her side, there are three dragons. Relief in this panel shows Garudeya was carrying his mother on his back and flied from Kadru house, since they were freed (Cahyono, 2016).

Hand Painted Batik

Painting a batik or painting with wax is done spontaneously. Hand painted batik by experts is usually done by drawing wax without prior sketches or outline on a cloth. Meanwhile, less expert painters may draw sketches or outlines first on the cloth before tracing down using wax (Susanto, 1980). Newer designs of hand painted batik do not follow existed traditional batik pattern, but depends entirely on the painters. In the case of giving names, batik painters are free to give name each time they make new creations or designs of hand painted batik (Utoro, 1979).

Hand painted batik is batik with free pattern and motif and has no obligation, unlike traditional batik. The coloring of hand painted batik is also free and various. Creations or designs using new way of coloring would generate colors in dynamic and beautiful order, although it needs highly artistic imagination. The pictures in batik motif are drawn by brushes of combination of brushes and canting (Soedjono, 1989).

RESEARCH METHOD

The making of hand painted batik of Garudeya story as a media of advertising Kidal Temple uses a method composed by Gustami (2004), which steps are:

- 1. Exploration phase, a phase of exploring the source of ideas, data and reference collection, data processing The result of the exploration or the analysis is used as the base for designing. In this step, the author did an observation to examine people's interest in visiting Kidal Temple. In addition to that, the author also observed details of the relief which is the main attraction and characteristics of Kidal Temple. From those observations, main idea and inspiration was perceived to make hand painted batik of Garudeya story. After that, the author gathered data and information from humanists and reference books in relation to Garudeya story. Having most of data and information, the author then processed, analyzed, and chose the idea that would be the base of design making. Then, the author mapped out sequences of events from Garudeya story which will be visualized into a hand painted batik.
- 2. Designing phase, a phase of visualizing the result of exploration or data analysis into some alternative sketch. The author would choose a sketch from the options to be the main reference for any final design. This final design (projection, fragments, details, or perspectives) will be referred in the materializing process. In this phase, the authors made some alternative hand painted batik of Garudeya story designs, then discussed and chose a design to be put in batik cloth.
- 3. Materialization phase, a phase of materializing the chosen design into a prototype, and made into perfection, matching the idea. The model could be a miniature of the actual work. When the model is deemed as perfect, then production process is conducted. This kind of process usually applies to the making of functional works. In this phase, the authors made a hand drawn batik on a piece of cloth, started from sketching (nyorek), up to coloring it.

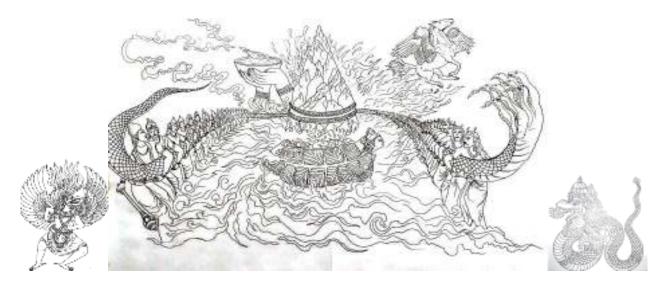
FINDINGS

The making process of this hand drawn batik of Garudeya, which adapts the concept of Kidal Temple's relief, has gone through art creation method by Gustami (2004) which are exploration stage, designing stage, and materialization stage, eventually produced three works. The author classifies manifestations of this creation and explains as following:

1. Amertamanthana



Picture 1. Original structure of Garudeya carrying dragons on Kidal Temple



Picture 2. A design of hand painted batik, entitled Amertamanthana

This design entitled Amertamanthana was drawn on a paper with a pencil. The object of this motif is inspired by relief in first panel in Kidal Temple. In the relief Garudeya is portrayed in the position of crouching down, his right leg is bend and kneeled down. Above his head there are three dragons. The dragons are on a lotus flower. The dragons' tails are hanging down and held by Garudeya. This panel tells about Winata and Garudeya, who lived as Kadru and 100 dragon-sons' slave. Garudeya's job was to babysit Kadru's snake-sons. Winata and her son was

enslaved by Kadru family, because he was cheated and lost in the bet of guessing the color of Uchaiswara horse which emerged from milky ocean (samodra/ksirarwana). Honoring the bet, the loser must be the slave of the winner.

2. The Battle in Finding Amerta Water



Picture 3. Original structure of the relief of Garudeya carrying Amerta Water in jar on Kidal Temple



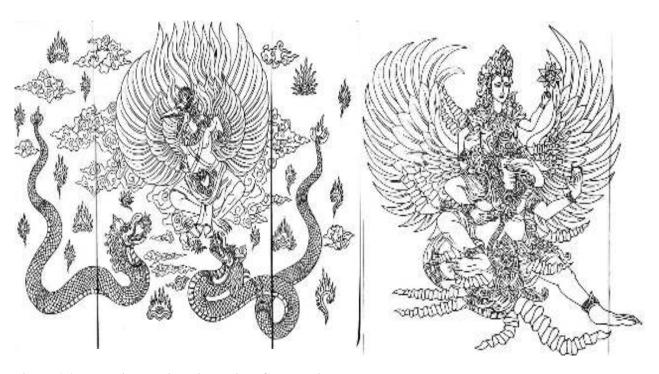
Picture 4. A hand painted batik design, entitled the battle in finding Amerta Water

This design entitled The Battle in Finding Amerta Water was drawn on a paper with a pencil. The object of this motif is inspired by relief in the second panel in Kidal Temple. In the relief Garudeya is portrayed in the position of crouching down, his right leg is bend and kneeled down. His right hand is holding a bunch of grass, and on his head there is Amerta water in a jar (Kamandalu). Garudeya put his life in the line as he struggled to get Amerta water, Wisnu was almost defeated. Eventually wisnu was willing to lend the water to Garudeya in one condition: Garudeya must be his ride.

3. Garuda Wisnu Kencana



Picture 5. Original structure of a relief in which Garudeya carrying his mother on Kidal Temple



Picture 6. A hand painted batik design, entitled Garuda Wisnu Kencana

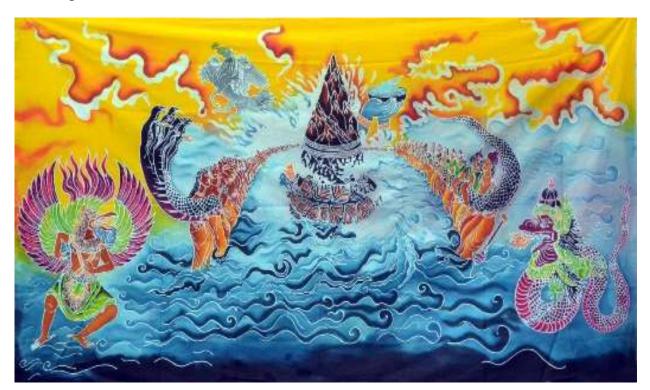
This design entitled Garuda Wisnu Kencana was drawn on a paper with a pencil. The object of this motif is inspired by relief in the third panel in Kidal Temple. In this relief Garudeya is portrayed in the position of crouching down, his right leg is bend and kneeled down. His right hand is raised and holding a round object. On his head, a woman sitting on a lotus flower. Her left leg is folded in, while her right leg is hanging down and held by Garudeya's right hand. On her side, there are three dragons. Relief in this panel shows Garudeya was carrying his mother on his back and flied from Kadru house, since they were freed. This relief is compared to the story of Garudeya from another source. After handing Amerta water to the dragons, Garudeya asked the dragons to wash themselves first. As they

clean themselves, Indra took Amerta water. The dragons were sad, and licked the grass on where Amerta water dripped. Thus, their tongues were sliced. Garudeya managed to free his mother and left the dragons as his mother was freed from their slavery. After that, Garudeya fulfill his promise to Wisnu to be his mount.

DISCUSSION

This hand painted batik was created to help people easily understand Garudeya story, which is carved on a relief on the Kidal Temple's wall. Hopefully, since people understand the story on this hand painted batik, many more will visit Kidal Temple and be interested to learn it. Thus, increasing the number of visitors in Kidal Temple. Type of batik created by the author is hand painted batik using synthetic coloring. The author chose hand painted batik because the mission of this creation is to promote Kidal Temple. So, the story of Garudeya can be clearly illustrated and easily perceived by audience. It is quite different to handmade batik which employs highly enhanced processing on the motifs, so that the motifs are hard to understand. In that case, people should have certain understanding to get the meaning of its motifs. Hand painted batik is not restrained to certain pattern nor obliged to certain procedures, thus it is easier to deliver meanings. Hand painted batik is a type of batik with various motifs and has no definite pattern like handmade batik. Creations or designs using new way of coloring would generate colors in dynamic and beautiful order, although it needs highly artistic imagination. The pictures in batik motif are drawn by brushes of combination of brushes and *canting* (Soedjono, 1989). The result of Hand Painted Batik Creation using Garudeya story on Kidal Temple is as following:

1. Hand painted Batik entitled Garuda Wisnu Kencana



Picture 7. A hand painted, entitled Garuda Wisnu Kencana

The first hand painted batik shows the surroundings in the middle of an ocean. The author visualizes ocean using blue color combined with bright sky which represents burning spirit in a struggle. In this visualization there are some figures, such as Garudeya, a dragon, a turtle, a flying horse, and Amerta water in a goblet. The author also visualizes gods holding a dragon which tied a mountain in the middle of an ocean. This hand painted batik tells a story of an act in which some gods along with Asura stired up an ocean to find Amerta water that was in the bottom of the sea, as Winata and Kadru played quizzes. The mountain used to stir up the ocean was called Mount Mandara, located in the Island of Sangkha (Sangkhadwipa). It was pulled out of the earth and used as a tool to stir the sea. A Basuki dragon was used as a rope to turn the mountain. The dragon's head was held by Asura, and the tail was held by the gods. Under the mountain there was Akupa turtle, which was a foundation of the mountain, so that the mountain was easy to turn, and was not sink.

So, the ocean of Ksirarnawa was stirred up and from there came out Ardhacandra, Sri and Laksmi, Ucchaihsrawa's horse, Kostubha's diamond, and finally Dhanwantari holding Swetakamandalu containing Amerta water. When the gods, Asura and Daitya were resting, Wisnu shifted himself into a beautiful woman and took Kamandalu which held Amerta water. This provoked war between gods which ended with gods' winning. In Wisnuloka, the gods drank Amerta water. Apparently amongst the gods there was a Danawa in disguise and he got to drink Amerta water. His disguise was blown up by Chandra and Aditya. They told Wisnu, so he threw his cakra to Danawa. The cakra hit Danawa on his neck. The body was dead, but his head was not. It was because as the cakra slice his throat, Amerta water had reached his neck. Learning this turn of event, Daitya became angry, and on some occasion Danawa's head would swallow Candra and Aditya (Zoetmulder, 1974).

Meanwhile, the game or quiz between Garudeya's mother, Winata, and Kadru, the mother of a hundred dragons, also took place during this moment. Since Ksirarnawa Ocean was being stirred up, Uchaiswara horse would come out of it. Winata guessed that Uchaiswara horse's tail was white, but Kadru asked her sons to shoot out venom to change the color of horse's tail from white to black. Thus, Winata was lost and she became Kadru's slave. Even Garudeya who was not involved in the bet became her slave, too. In the illustration on batik motif, the author depicted two parties, Garudeya on the right and dragons on the left. It can be interpreted as a condition of slavery among people, such as imperialism and colonialism.



Picture 8. Hand painted batik, entitled the battle in finding Amerta Water

The second work tells a story of Garudeya's effort to get Amerta water which was protected by Wisnu. The author illustrates Garudeya in a battle position, surrounded by fire and clouds. It means in the fight Garudeya pour out his power and strength in order to save his mother. In the hand painted batik, there is Amerta water in the middle of whirling air of Wisnu's cakra. It shows that Amerta water is a holy water guarded by the gods. Amerta water can also mean eternal holy water (Zoetmulder, 1974). Freedom and immortality can only be apprehended if we talk about *jivan mokta*, which is a characteristic of tantra religion about accelerating the process of *moksa*. It is a freedom of all secular bonds to reach perfection, although the person is still alive (Santiko, 2015).

Considering his spirit to get Amerta water, in the battle between Wisnu and Garudeya, Wisnu was almost defeated. Finally, Wisnu was willing to lend Amerta water, if only Garudeya wanted to be Wisnu's mount. The main idea that is illustrated in the batik is the fight grasping freedom from slavery.

In the third work, there are two storylines. The first is a story when Garudeya gave Amerta water to the dragons who enslaved his mother. Garudeya is illustrated with his wings widespread and straightly stand to show his cautious while facing the sly dragons. He must bring his mother out of Kadru and the dragons' house. Meanwhile, two dragons with open mouth is a visualization of the dragon's desire to drink Amerta water soon. Amerta water from Wisnu was handed to the dragons by Garudeya, then he told the dragons to clean themselves before drinking Amerta water. At that moment, the water was taken by Indra. The dragons were sad, and licked the grass on where Amerta water dripped. Thus, their tongues were sliced. Garudeya managed to free his mother and left the dragons as his mother was freed from their slavery.

The second story is about flying Garudeya, along with Wisnu on his head. It is a visualization of Garudeya who fulfilled his promise to Wisnu to be his ride. This story shows a dutiful son who fought vigorously to help his mother, even Garudeya would do anything to free his mother. If this value is applied to the concept of nationalism, we must be like Garudeya who defends his mother, in this case is our motherland, at all cost. Our ancestor had applied this value as they drove out colony and gave Indonesia indepence. In the Javanese mythology Garudeya, as a mount of Wisnu, blazed brightly, so most people would think him as Agni, God of Fire. Garudeya was considered as the savior and used as a symbol of ever blazing spirit to fight.

3. Hand painted Batik entitled Garuda Wisnu Kencana



Picture 9. Hand painted batik, entitled Garuda Wisnu Kencana

CONCLUSION

The making of this hand painted batik is the author's effort to help conserving Indonesian's heritage which is Kidal Temple by illustrating a story of Garudeya relief into a colorful and understandable batik motif. The privilege of Garudeya relief in Kidal Temple is that it is the only story carved on Kidal Temple's wall. It means Kidal Temple is a temple which was made to tell the story of Garudeya. On other temples, the story of Garudeya is mingled with other story as well.

By publishing this work in public, we hope common people know that Kidal Temple has its own stories and interesting education philosophy. Apart from conserving a temple as a cultural heritage, the authors chose to make this product to conserve batik as a Masterpieces of the Oral and the Intangible Heritage of Humanity, done by UNESCO. Also, the authors want to introduce and pay attention to the philosophic value, which is an example of human relation with God, in the temple's relief and batik.

REFERENCES

- Atmojo, W. T. (2008). Pariwisata di Gianyar Bali dari wisata budaya sampai wisata wana. Jurnal Bahas, 69.
- Cahyono, D. (2016). Kisah Garudeya Candi Kidal. Retrieved from https://www.jurnalmalang.com.
- Gustami, S. P. (2004). *Proses penciptaan seni kriya "untaian metodologis*". Tesis. Program Penciptaan Seni Pascasarjana Institut Seni Indonesia Yogyakarta.
- Santiko, H. (2015). Ragam hias ular-naga di tempat sakral periode Jawa Timur. *AMERTA, Jurnal Penelitian dan Pengembangan Arkeologi, 33*(2), 85–96.
- Sedyawati, E. (2010). Budaya Indonesia: Kajian arkeologi, seni, dan sejarah. Jakarta: Rajawali Pers.
- Soedjono. (1989). Seri kreatif dan terampil batik lukis. Bandung: CV Remadja Karya.
- Susanto, S. 1980. *Seni kerajinan batik Indonesia*. Jakarta: Balai Penelitian Batik dan Kerajinan, Lembaga Penelitian dan Pendidikan Industri, Departement Perindustrian R.I.
- Turaeni, N. N. T. (2015). Aplikasi adi parwa dalam relief situs Candi Kidal. *Forum Arkeologi Volume*, 28, (2), 131–144.
- Utoro, B. A. (1979). *Pola-pola batik dan pewarnaan untuk SMK*. Jakarta: Departemen Pendidikan dan Kebudaya-an.
- Wardani, Y. K. (2013). *Makna simbolik relief Sudamala dan Garudeya di Candi Sukuh relevansinya dengan pengembangan nilai-nilai karakter dalam pembelajaran IPS Sejarah*. Skripsi. Fakultas Keguruan dan Ilmu Pendidikan Universitas Sebelas Maret Surakarta.
- Zoetmulder, P. J. (1974). Kalangwan: Sastra Jawa kuno selayang pandang. The Hague: Martinus Nijhoff.

ENHANCING MICRO-ENTREPRENEURS' BUSINESS ACTIVITIES VIA SMART MOBILE DEVICES: A CASE STUDY OF PHUKET

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ABSTRACT

Poor populations in developing countries receive tremendous benefits from using mobile phones in communication and business activities. However, the debut of high-speed internet since 2010 transformed ordinary mobile phones into smartphones, which became better devices for business, knowledge acquisition, communication, financial transactions, and so on. These developments seem to suggest that micro-entrepreneurs in developing countries should increase their use of smart mobile devices in the future. Therefore, there is a crucial need to study environmental factors that enhance the use of smart mobile devices by Thai micro-entrepreneurs. The population for the study was microbusiness operators in Muang district, Phuket, Thailand. 224 entrepreneurs were chosen by purposive sampling at important trading sites during 2018. The instrument for the research was a questionnaire which consisted of 23 variables divided into five independent factors (social, economic, data distribution, technology, and App platform) and a dependent factor (intention to use). Multiple regression analysis was used to analyze the collected data. The results show a significant relationship between some environmental factors to the dependent factor. The results can help academics and governments to understand micro-entrepreneurs' hidden needs and to generate strategies enhancing micro-entrepreneurs' business activities toward Thailand's 4.0 policy.

Keywords: Retailing, micro-entrepreneur, smartphone.

INTRODUCTION

There have been many movements to enhance online business. Internet communication technology is becoming a channel of buying and selling goods and services for big business organizations. The development of application software, mobile communication devices and the new generation of broadband cellular network technology has led to a variety of B2C and C2C businesses. Consumer engagement of smart mobile devices is the key to business success. On the other hand, smart mobile devices have also become instruments of learning, connection, and gateway for limited budget entrepreneurs to learn and do businesses. These developments are in line with Thailand's 4.0 policy. The government should encourage entrepreneurs and start-up businesses to seek more benefits from the growing knowledge via online information.

During Thailand's economic crisis in 1997, big businesses collapsed and the unemployment rate rose. The Thai government has realized that most of small and medium enterprises (SME) have played a key role in strengthening economic stability, creating new entrepreneurs, and generating income to the country. SME generates employment at the grassroots level as well as providing the foundations of sustainable development (Niratorn, 2014). The government has initiated several support programs and different financial resources to aid small and medium enterprises and microbusinesses. In 2015, Bloomberg news agency (ASTV Manager Online, 2015) ranked Thailand as the happiest economy from 15 economic zones worldwide. This survey used misery indicators (Misery index) that affected consumers directly, including the inflation rate and the unemployment rate as measures of the economic health in each country. Later on, Thailand had the lowest misery index as a result of low inflation and low unemployment from 2015 until 2018.

Bloomberg news agency (ASTV Manager Online, 2015) added an analysis from a spokesperson for the Bank of Thailand who mentioned that the country's unemployment rate was low because the working age population, who have no access to the labor market, can choose to enter the agricultural sector or develop their own business enterprise easily. For the latter, it can be said that their businesses can start out as a micro or small business easily with low investment and appropriate qualifications. Being self-employed is perceived as a benefit by many in addition to the financial side (Walker & Brown, 2004). Moreover, this easy startup may be due to a unique consumption culture, Thailand's way of life, and street business practices in Thailand. For example, consumers are used to buying foods and other goods from businesses on the streets, but not on the public main roads. There has been little government regulation, control, or law enforcement as there are low public health standards for street foods and

beverages. Therefore, it is easy to begin a business and gradually learn to make it a success. These businesses can be in the form of small booths, street vendors, small trolleys, sidecars, and modified pickups. In addition, another group of retail operators has followed the growth of the digital economy and electronic commerce. These retail operators are less attached to their traditional trade area. They can operate over their own website, their intermediaries' search engines, and social media platforms. Some of them choose to blend business by utilizing both online and shop stores while developing higher standards for product quality and style. Some operators use their managerial and financial capabilities to expand their businesses with the franchise system (Small and Medium Enterprises Promotion Office, 2010).

The retail businesses of micro and small entrepreneurs in Thailand have been growing and expanding rapidly because of the encouraging government policies introduced after the economy crisis in 1997. The retail business has been critically important to the economy and social development because retail businesses have become a source of income generation and job opportunities for unemployed workers. According to statistics by Small and Medium Enterprises Promotion Office (2010) released in 2014, the operators of small and medium enterprises (SMEs) across the country have reached 2.74 million owners—accounting for 99.7 percent of all enterprises in Thailand. They employ 10.5 million workers or 80.3 percent of the total employment in the country. The Gross domestic product of small and medium-sized enterprises (GDP-SMEs) was worth 5,212 billion Baht, accounting for 39.6 percent of the total GDP of the country. The growth rate of the GDP of SMEs was at 0.2 percent compared to the GDP of the country which grew by 0.9 percent. This clearly shows that small and medium-sized enterprises (SMEs) are an important part of the engine driving the economy of Thailand (Iampum & Tangwirun, 2015).

Phuket itself is the province with a growing economic importance to the country in terms of the capital of tourism on the Andaman coast. Apart from sea, sun, and sand, microbusinesses in local trading sites are another tourist attraction which show the local way of life. They are not just trade areas for local customers anymore. The Ministry of Tourism and Sport has highlighted the concept of street food as a way to strengthen Thai culture and livelihood and for enhancing Thai tourism in recent years. Therefore, operators of retail businesses have become a major base that supports local economic growth and the livelihoods of local people. Meanwhile, micro retail businesses can grow well in Phuket because there have been an expansion of modern trading sites around the island. If these sites attract local shoppers as well as foreign ones, then they become successful. The development of rental space in modern commercial sites has expanded to most districts and communities. This advance has increased the opportunity for unemployed workers and part-time sellers to do retail businesses. The business trends in Phuket show that the key to success in a modern retail business is entrepreneurs who are interested in trading new and innovative products and/or products which are popular with foreign tourists—such as souvenirs, fruits, seafood, and local cooked food.

The focus on building the knowledge and understanding of local microbusinesses is a key idea of enterprise development in today's economy. Researchers in the past has found that the operations of small business owners have various factors that are important in delivering business success, such as quickly seeking opportunity, learning from changes in the environment, and searching for available trends by word of mouth, print, media, and online media. These new ideas could involve product innovations, packaging, decorations, formats, and style. It can be said that such knowledge has brought marketing art and design to the business development of micro-entrepreneurs recently. Therefore, this research was critically interested in how micro-entrepreneurs can learn to improve their business via the internet or ICT—especially, the access made from smartphones or smart mobile devices. The results of this study contribute to a knowledge base on micro-entrepreneurs in the Muang District of Phuket. It is expected to contribute to strengthening the sustainability of microbusinesses. For this research, the focus was on small-scale entrepreneurs. Therefore, the definition of small-scale enterprises accepted by global businesses is used: Microbusiness or Microenterprise is a personal or family business, with one to five people working to earn a living for themselves and their family members. They will only expand the business to increase revenue due to increasing daily living expenditures or by having a clear path for expansion (Purateera, 2008; Niratorn, 2014).

LITERATURE REVIEW AND HYPOTHESES

A consumer survey of internet users in Thailand during 2015 (Electronic Transaction Development Office, 2015) found out that internet users in Thailand have the following characteristics. Most of the users spent roughly 42 to

76.9 hours per week on the internet, especially from Generation Y, while others spent roughly 54.2 hours per week or roughly 7.7 hours per day. This survey suggested that Generation Y, who are part of the internet Era, have spent much of their time on the internet and various social media networks. This indication confirmed the fact that generation Y has a strong interest in various on-line communication and IT technology. They consumed the social network media as part of their day-to-day life. Social network media has become a primary form of communication among users. According to the National Statistical Office (2015), the generation who are between 15 to 24 years old spent the highest usage fees for various benefits including entertainment, communication, information exchange, electronic commerce, et cetera. According to Manager Online (2015), the young generation tends to follow social trends and the lifestyle of their interest group. They like seeking for new things with heavy impact on the social media network.

Smart mobile phones and their applications are one of the most important reasons why information and communication technology in the era of internet connection has become more and more popular and has become a part of everyday life. Everyone, including public and private organizations, has been involved in the use of internet communication including public relations, marketing information, business operations, as well as teachers in academic organizations. Smart phone equipment is innovative, high performance, low weight, and compact. So, it can be carried anywhere. Internet accessibility devices have tended to shift from non-mobility type to be mobility-type, especially via smartphones (both Android & IOS system). According to researchers, the advancement of technology makes the availability and use of devices easier and more engaging for consumers. Consumers are increasingly involved with the internet due to freedom of usage. Kim, Kim, and Wachter's study aimed to explain the intentions involved in device engagement as well as create a model explaining the relationship factors of the users' motives, the perceived value, and satisfaction which impact on the engagement intentions of mobile devices (Kim, Kim, & Wachter, 2013). In addition to engagement, the technology, which comes with these mobile smart devices, is important to business and marketing communications (Watson, McCarthy, & Rowley, 2013), such as spot-based advertising via smartphones or the usage of QR Code Wine APP in the wine market, where information has a great impact on the decision making of buyers (Higgins, Wolf, & Wolf, 2014). Moreover, regarding the technology trend, research related to small business development has indicated that ICT plays an important role in entrepreneurship development in business (Mali, 2015). But, the multiple barriers to using proper ICT systems, such as capital, low level training, and inadequate operating capacity (Stansfield & Grant, 2003; Wolcott, Qureshi, & Kamal, 2007), cause small business operators to access the ICT system via mobile phones as instruments for businesses, rather than just communication devices (Matlala, Shambare, & Lebabo, 2014). Moreover, research by Rumanyika and Galan (2015) states that there is a clear difference in capital growth between ordinary mobile phone users compared with intelligent mobile users.

Therefore, this research would like to classify five environmental factors that can impact the intention of using mobile devices in accessing the internet by micro-entrepreneurs as follows. First, on social aspects, the research focuses on using the internet via smartphones in social activities, such as using mobile phones by family members and friends for communicating on important occasions. Ramyakur's (2018) study supports that online social networks create a huge demand for people who do not yet have intelligent mobile phones, entrepreneurs could spend a lot of time in using the internet via smartphones to access social networks and communicate with close people.

Second, on economic aspects, micro-entrepreneurs could give importance to factors such as extra income with increased convenience from online sales, affiliate communication in distribution channels, and cost reduction in distribution channels for quality and style. Micro-entrepreneurs could use the smartphones to access the internet more due to financial benefits in line with the results of Bovornkiratikajorn's study (2017) on the trading of fashion products in social media. The seller can easily enter the market due to low operating costs with an initial capital of around 2,000 to 30,000 Baht (USD 60 to 1,000). By selling through social media, sellers do not need to have a storefront or pay for the shop setting or the wages of the salesperson. This is even cheaper than selling e-Commerce with a website because there is a cost to register a website domain name. There is also no profit sharing with websites that are online shopping sites.

Third, on the information distribution aspect, the research focused on obtaining useful information for business operations through sharing data, news, images, videos, and other content on the internet. Micro-entrepreneurs could

use the smartphone to access the internet due to the variety of data in accordance with the study of Kidsom and Vorlapanit (2015) on "Willingness to Pay and Usage for High-speed Internet and Digital Economy Promotion of the Local Administrative Unit: A Case Study of three Northern Provinces in Thailand". The results showed the use of the internet in that target area as most of the sample used the internet to find information for work and for watching professional training videos. There was a small number of sample groups that used the internet to find market information and agricultural product prices or to seek knowledge in foreign languages. However, one obvious benefit of using the Internet is that many people used it to find information about diseases, illnesses, as well as the drugs use to treat diseases.

Fourth, on technological aspects, the research focuses on using smartphones to access the internet, such as system speed, lower equipment prices, and government support for free Wi-Fi. Micro-entrepreneurs could use smartphones to increasingly access the internet due to the development of stable system speeds in accordance with Ramyakur (2018) who concluded that four factors, such as touch screen smartphones, high-speed internet, cost of using the device, and online social network, are crucial to user engagement in Thailand. Furthermore, the results of Kidsom and Vorlapanit's study (2015) on "Willingness to Pay and Usage for High-speed Internet and Digital Economy Promotion of the Local Administrative Unit: A Case Study of three Northern Provinces in Thailand" found that the average person would be able to pay an internet service fee in the range of USD 10 to 20 per month, with an average monthly value of USD 15 per month. This study concluded that the sample group was willing to pay more when they know they have a long wait to download data if they pay less.

Finally, on App platform aspects, the research focuses on the use of smartphones to access the internet, such as business knowledge websites, online social networking, and communication networking. Micro-entrepreneurs use the internet to access social networks online via smartphone due to the development of applications in various platforms. Tarute, Nikou, and Gatautis (2017) add that the growing popularity of mobile technology and applications lead many companies to develop relations with consumers through a mobile application and suggest that "design solutions and information quality will result in higher engagement leading to continuous usage of mobile applications." Applications should be convenient to use in order to communicate and create a business with others in the online society.

Based on these previous studies, survey results, and trends, I am interested in studying the use of mobile phones in accessing the internet by microbusiness operators in everyday life and the positive environmental factors that affect the intention of usage. One benefit of this study is that it will improve our major understanding of mobile users, allowing us to enhance the long term research, development, and planning of long term strategies for Thailand's Digital Economy detailed in the government's "Thailand 4.0" plan. Therefore, the research objectives are: 1) to study the use of intelligent mobile devices by Microbusiness operators in Muang District, Phuket, and 2) to search for a predictable relationship between environmental factors and the intention to use smart mobile devices, such as phones and tablets, to increase internet access. Therefore, the hypotheses are as follows:

Hypothesis testing

- H_1 : There is a significant relationship between social factors and the intention to use smart mobile devices to access the internet.
- H_2 : There is a significant relationship between economic factors and the intention to use smart mobile devices to access the internet.
- H_3 : There is a significant relationship between data distribution factors and the intention to use smart mobile devices to access the internet.
- H_4 : There is a significant relationship between technology factors and the intention to use smart mobile devices to access the internet.
- H_5 : There is a significant relationship between App platform factors and the intention to use smart mobile devices to access the internet.

Regarding Table 1, all Cronbach's Alpha values for the six variables are higher than 0.6, therefore, all statements of indicators are reliable measures of the variables.

Table 1 Operationalization of Variables

Variables		Indicator	Measurement	Cronbach's Alpha
Intention to use	1.	willing to use smartphones in accessing the internet continuously	Likert scale 1–5 eight questions	0.950
	2.	willing to suggest friends and partners use smartphones to		
		access the internet		
	3.	willing to learn more about how to use smartphones for business		
	4.	willing to pay more for higher technology on smart mobile devices		
	5.	spending more time in searching data via smartphone		
	6.	searching data via smartphone more frequently		
	7.	writing and sending data via smartphone more often		
	8.	willing to pay more to access the internet		
Social factors	1.	family members use smart phones	Likert scale 1-5	0.91
	2.	friends use smartphones	three questions	
	3.	You follow the activities of family members and friends		
		via smartphone		
Economic factors	1.	earning more via online selling	Likert scale 1-5	0.912
	2.	business partners use social media for business	three questions	
	3.	online transactions provide convenience and cost		
		reduction		
Data distribution	1.	able to receive knowledge from videos on YouTube and	Likert scale 1–5	0.872
factors		famous business blogs	three questions	
	2.	able to read information and knowledge from business websites		
	3.	able to share business data in an online community		
Technology factors	1.		Likert scale 1–5 three questions	0.865
	2.	cheaper price of mobile communication devices increase	1	
		the usage of online social networks		
	3.	provincial authorities have increased open access to the		
		internet		
App platform	1.	business knowledge websites (Thaifranshinecenter.com)	Likert scale 1–5	0.825
factors	2.	online social networks (Facebook, Instragram, YouTube)	three questions	
	3.	online communication networks (Line, Msn, whatapp)	1	

RESEARCH METHOD

Population and Sample

This explanatory study was intended to be a pilot quantitative study. The population of this study was roughly 500 to 700 business operators having businesses in several local markets in the area of Muang district, Phuket. The sample size of 222 was calculated via the principle of Yamane (1967) with a confidence level of 95% and acceptable error of 5%. Only entrepreneurs with a smartphone were selected purposively from the trading sites in the area of Muang district. In case of mistakes and incomplete data, 250 sets of questionnaire were distributed to make sure the desired number of 222 was reached.

Data Analysis

The methodology called for both descriptive analyses as well as inferential analysis, as detailed below. General/demographic data included gender, age, education, length of business operation, type of access to the internet, monthly expense for the internet, and mobile devices used to access the internet. The instrument for the research was a questionnaire which consisted of 23 variables divided into five independent factors (social, economic, data distribution, technology, and App platform) and a dependent factor (intention to use) as shown in Table 1. Analyzing data about environmental factors which impact the use of smartphones to access the internet will involve descriptive statistics, which include frequencies, percentages, means, and standard deviations.

For the interpretation of descriptive statistics, we will divide into five class internal, with equally interval (Bunnag, 1994):

Interval(I) =
$$\frac{\text{Range}(R)}{\text{Class}(C)} = \frac{5-1}{5} = 0.80$$

Below is the interpretation of each class interval, from Most to be Least as below:

Range: 4.21–5.00 indicated highest important Range: 3.41–4.20 indicated highly important Range: 2.61–3.40 indicated Fairly important Range: 1.81–2.60 indicated Slightly important Range: 1.00–1.80 indicated Least important

Inferential statistical analysis will involve the Pearson Product Moment Correlation Coefficient as well as Multiple Regression Analysis.

FINDINGS

Data collection provided 224 completed sets of questionnaires. The findings of the data analysis of will be reported descriptively first. Then the inferential analysis will be reported to answer the hypotheses later.

Table 2 Personal information of respondents

Category	Characteristic	Number in Sample	Percentage	Cumulative Percent
Gender	Male	82	36.6	36.6
	Female	142	63.4	100
Age	Below 21 Years (not lower than 18)	5	2.2	2.2
	21 to 30 Years	73	32.6	34.8
	31 to 40 Years	79	35.3	70.1
	More than 40 Years	67	29.9	100
	(not higher than 65)			
Education level	Primary School	16	7.1	7.1
	Early Secondary School	17	7.6	14.7
	Late Secondary School	49	21.9	36.6
	Undergraduate	22	9.8	46.4
	Graduate	108	48.2	94.6
	Postgraduate	12	5.4	100
Type of Access to internet		120	53.6	53.6
• •	Paid Wi-Fi network	66	29.5	83.0
	Public free Wi-Fi	24	10.7	93.8
	Home Wi-Fi	14	6.3	100
Length of business	Less than 1 Year	35	15.6	15.6
operation	1–3 Years	79	35.3	50.9
•	4–7 Years	53	23.7	74.6
	More than 7 years	57	25.4	100
Monthly Expense for	Less that USD 6	21	9.4	9.4
Internet	USD 6 to 13	49	21.9	31.3
	USD 13.01 to 18	43	19.2	50.4
	USD 18.01 to 24	67	29.9	80.4
Devices used to access the	More than USD 24	44	19.6	100
internet	Smartphone	196	87.5	87.5
	Laptop	16	7.2	94.7
	Tablet	12	5.3	100

The research found that most of the sampled micro-entrepreneurs were female at 63.4.7 percent. Most of them were in the age group of 21 to 30 years at 35.3 percent. Most of them were graduates at 48.2 percent. The length of the business operations was mostly between 1 year and 3 years at 35.3 percent of the respondents. Most micro-entrepreneurs used internet services via cellular systems of mobile phones at 53.6 percent of the respondents. The cost of connecting to the internet is USD 18.01 to 24 for most, or 29.9 percent, of the respondents. The mobile device which is most often used to access the internet is a smartphone at 87.5 percent of the respondents. In addition to the

personal information of the respondents, more than half of them originally lived in Phuket (53.1 percent of the respondents). The size of the workforce in the business was at two to three persons for 47.3 percent of the respondents. Investment expenses in the business were 5,000 to 10,000 Baht (USD 150 to 300) at 38.4 percent of the respondents. The business category with the largest number of entrepreneurs is cooked food and drinks related businesses at 30.3% percent of the respondents. The most frequent number of times to read content using a mobile device was between six to 10 times a day at 36.2 percent of the respondents. The average duration of reading content on a mobile device was 31 to 60 minutes, accounting for 25.4% of the respondents.

Table 3
The Means and Standard Deviations of Environmental Factors and the Intention to Access the Internet via Mobile Devices Factor

Variable	\overline{X} Mean	S.D.	Importance level
Social factor (mso)	4.3155	.68413	highest
Economic factor (mec)	3.9122	.94478	high
Data distribution factor (mdd)	4.0045	.94623	high
Technology factor (mte)	4.1057	.82151	high
APP platform (map)	3.8824	.96298	high
Intention to use (Int, <i>Y</i>)	3.7974	.91077	high

Regarding the descriptive statistics presented in Table 3, the social factor is rated to be the highest in terms of importance level to access the internet via mobile devices. The rest of the independent variables, plus the dependent variable, are rated at a high level of importance.

Table 4
Correlations Coefficients between the Independent and the Dependent Variables

		mso	mdd	mec	mte	map	Int
mso	Pearson Correlation	1	.502**	.587**	.604**	.514**	.538**
mdd	Pearson Correlation		1	.657**	.676**	.699**	.631**
mec	Pearson Correlation			1	.665**	.743**	.635**
mte	Pearson Correlation				1	.695**	.639**
map	Pearson Correlation					1	.664**
Int (<i>Y</i>)	Pearson Correlation						1

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Correlation coefficients between the independent and the dependent variables were tested by using the Person's Correlation Coefficient. These correlations were used to analyze the environmental factors relationship with the intention of microbusiness entrepreneurs in Muang district, Phuket, to use mobile devices to access the internet. Every independent variable had a positive relationship with the dependent variable that was significant at the 0.01 level (2-tailed, 0.538 - 0.664). So, all independent variables can be used to calculate the regression equation.

Table 5
Analysis of Variance (ANOVA) of the Environmental Factors Affecting the Intention of Using Mobile Communication
Devices to Access the Internet

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.529	5	20.306	53.045	$.000^{a}$
	Residual	83.452	218	.383		
	Total	184.980	223			

a. Predictors: (Constant), map, mso, mdd, mte, mec

From Table 5, the results of variance analysis of multiple regression analysis confirmed that the independent variables, including social factor, technological factor, data distribution factor, and App platform factors, affected the

b. Dependent Variable: Int

dependent variables on the intention of using mobile internet communication devices for business improvement. The significant value of the equation was found to be at .000 within the statistically significant level at .01.

Table 6
Result of Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		C:-	Collinearity Statistics	
Moaei	В	Std. Error	Beta	ι	Sig.	Tolerance	VIF
(Constant)	.110	.273		.402	.688		
mso	.181	.080	.136	2.262	.025	.572	1.747
mdd	.181	.067	.188	2.695	.008	.424	2.360
mec	.135	.073	.140	1.852	.065	.364	2.743
mte	.186	.081	.168	2.293	.023	.386	2.594
map	.229	.074	.242	3.115	.002	.342	2.922

a. Dependent Variable: Int (Y)

R = 0.741; $R^2 = 0.549$; F = 53.045; p-value = 0.000 < 0.01

From the Multiple Regression Analysis with the Enter method, it was found that the independent variables, or five factors, had a fair relationship to the intention of using mobile devices to access the internet with R = 0.741. These five variables can explain the overall effect on the intention of using a mobile internet communication device with a 54.90% forecast power, having a predicted error of 0.618. It was also found that not all environmental factors were significant at the level of .000 (Sig = .000), which means that only four factors can predict the overall effect on the intention of using mobile internet communication devices significantly. The best predictor variable is the App platform factor which affects the intention of using mobile internet communication devices with a coefficient of regression at 0.229. This is followed by the technological factor with a regression coefficient of 0.186, the data distribution factor with a regression coefficient of 0.181, and the social factor with a regression coefficient of 0.181. Lastly, the economic factor, with regression coefficient of 0.135, did not have a significant influence on intention due to a *p-value* > .05. There is a significant relationship between four of the environmental factors and the intention of using smart mobile devices to access the internet. Therefore, it can be concluded that H_1 , H_3 , H_4 , and H_5 are accepted and H_2 is rejected.

Multicollinearity checks were carried out by examining the Variance Inflation Factor (VIF) or Tolerance or Eigen Value. The criteria of examination were as follows: If the Eigen Value or Tolerance <0.2 or Tolerance <0 (Pedhazur, 1997), a multicollinearity problem is indicated. The Variance Inflation Factor or appropriate VIF should not exceed 4. If so, the independent variables are correlated (Miles & Shevlin, 2001). From the results of Table 6, it is found that the lowest tolerance value is 0.342, which is not lower than 0.2, and the highest VIF is 2.922, which is less than 4. Therefore, the independent variables are unrelated or do not encounter the multicollinearity problem.

Based on Table 6, it was found that only some of the environmental factors affecting the choice of Internet access devices had a positive relationship to the intention of using mobile internet communication devices for business improvement. Int (*Y*) was statistically significant at the .01 level without any problems of multicollinearity as indicated by the Tolerance and the calculated VIF. Creating multiple regression equations to predict the intention of using Internet communication devices for business improvement can be done by using the factor values from Table 6 for both the raw score equation and standard score equation.

Forecast equation in raw score form:

Y (Overall effect on the intention of using mobile internet communication device) = .110 + .229 (App platform) +.186 (Technology) +.181 (Data distribution) +.181 (Social) + .135 (Economic)

Equation of Forecast in Standard Score:

Z = .242 (App platform) +.188 (Data distribution) +.168 (Technology) +.136 (Social) + .140 (Economic)

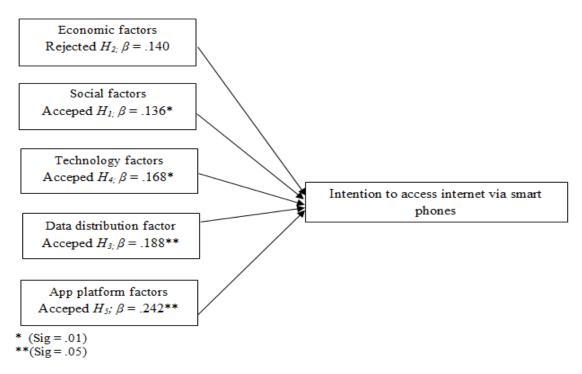


Figure 1. The model of factors enhancing intention to access internet via smart phones

DISCUSSION

The personal information of the respondents trading in Muang district, Phuket, shows that they are middle-aged and educated people that can cope well with digital technology. They can afford to pay monthly expenses to receive adequate high speed internet. Most micro-entrepreneurs trade and sell products used in everyday life such as food, drinks, clothes, accessories, and mobile phones. The research results are summarized in figure 1 and they show that not all factors significantly influence the intention of using a mobile internet communication device. However, significant relationships between four environmental factors and the intention of using mobile internet communication devices were found. Although the economic factor has a positive relationship, it does not have a real impact on the intention of using a mobile internet communication device. The cause of this low impact could be the nature of the businesses that the sampled micro-entrepreneurs represent. They may not involve themselves in online business enough to benefit or feel the importance of the economic factor. It is obvious that the social factor, the data distribution factor, the technology factor, and the app platform factor are positively correlated with and influence the intention of using a mobile internet communication device for this group of micro-entrepreneurs. These factors seem to reflect some necessary conditions influencing the usage and engagement of mobile device users significantly. On the other hand, the left out economic factor should not be ignored from further study because the factor almost obtained a significant value and the mean score is at a high importance level. It might be proven to significantly influence a different sample group.

CONCLUSION

The significant relationship between the environmental factors and micro business entrepreneurs', in Muang district, Phuket, intentions to use mobile devices in accessing the internet shows that generating innovative software applications that suit various different groups of users exclusively must be given a long-term commitment. This will help enhance the efficiency of using applications over a smartphone. The findings suggest that users are happy with the present situation of services, but improvement of relevant information technology should be kept up to meet the increasing expectations of smartphone users by improving information content and the technology of mobile devices in line with future demands. Government policy should support private sector in the generation of useful business content rather than working separately on government's own, which is risky as its services may become obsolete and out of date. This is due to the pressures and challenges of the rapidly changing world of the digital economy and the need to implement Thailand's 4.0 policy efficiently.

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REFERENCES

- ASTV Manager Online (2015) *Bloomberg" raises Thailand with the most economic happiness in the world.* Retrieved March 4, 2015, http://www.manager.co.th/Around/ViewNews.aspx?NewsID = 9580000026004.
- Bunnag, M. (1994). Statistics for decision making. Bangkok: Chulalongkorn University.
- Bovornkiratikajorn, C. (2017). Social commerce: A case study of fashion products. *Veridian E-Journal, Silpakorn University (Humanities, Social Sciences and arts)*, 10(2), 2056–2071.
- Electronic Transaction Development Office (2015). Report of the survey of internet user behavior in Thailand in 2015. Bangkok: Index and Survey Division.
- Higgins, L. M., Wolf, M. M., & Wolf, M. J. (2014). Technological change in the wine market? The role of QR codes and Wine apps in consumer wine purchases. *Wine Economics and Policy*, *3*(1), 19–27.
- Iampum, J., & Tangwirun, A. (2015). *Stat in focus, statistics and information department Bank of Thailand*. Retrieved March 4, 2015, https://www.bot.or.th/Thai/Statistics/Articles/Doc_Lib_StatinFocus/SMEs.pdf.
- Kidsom, A., & Vorlapanit, N. (2015) Willingness to pay and usage for high-speed internet and digital economy promotion of the local administrative unit: A case study of 3 northern provinces in Thailand, MUT. *Journal of Business Administration*, 12(2), 54–72.
- Kim, Y. H., Kim, D. J., & Wachter, K. (2013). A study of mobile user engagement (MoEN): Engagement motivations, perceived value, satisfaction, and continued engagement intention. *Decision Support System*, *56*, 361–370.
- Mali, B. J. (2015). *The impact of mobile phone usage on youth micro enterprise development in Embakasi South in Nairobi*. Unpublished dissertation. The University of Nairobi, Kenya, Nairobi.
- Manager Online. (2015). *Insights into Thai consumer behavior in 3 GEN, (online)*. Retrieved from http://www.manager.co.th/iBizChannel/ViewNews.aspx? NewsID = 9580000110621 (March 5, 2016).
- Matlala, R., Shambare, R., & Lebambo, M. (2014). How South African spaza shop owners utilize mobile communication technologies to run their businesses. *European Scientific Journal*, 10(25), 180–195.
- Miles, J., & Shevlin, M. (2001). *Applying regression and correlation: A guide for students and researchers*. London: Sage Publications.
- National Statistical Office. (2015). Survey of the use of information and communication technology in household, 2015. Bangkok: Forecast Bureau.
- Niratorn, N. (2014). Management of hawker trafficking in Bangkok: Observations and suggestions *Journal of Sociology of Anthropology*, 33(2), 47–72.
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction*. Stamford, CT: Thomson Learning.
- Purateera, T. (2008) *The model for developing sustainable micro-entreprenneur*. Doctor of Philosophy Thesis. Development Science, Graduate School, Khon Kaen University.
- Ramyakur, P. (2018). Mobile revolution: A study of factors causing a step to mobile age in Thailand, and following impacts. *Siam Communication Review*, 17(22), 45–53.
- Rumanyika, J. D., & Galan, R. M. (2015). *The dynamics of mobile phone technologies and the performance of micro and small enterprises in Tanzania*. The Third Asia Pacific Conference on Global Business, Economics, Finance and Banking.
- Small and Medium Enterprises Promotion Office. (2010). *Situation report small enterprises 2010*. Bangkok: Office of Small and Medium Enterprises Promotion (OSMEP).
- Stansfield, M., & Grant, K. (2003). An investigation into issues influencing the use of the internet and electronic commerce among small-medium sized enterprises. *Journal of Electronic Commerce Research*, 4(1), 15–33.
- Tarute, A., Nikou, S., & Gatautis, R. (2017). Mobile application driven consumer engagement. *Telematics and Informatics*, 34(4), 145–156.
- Walker, E., & Brown A. (2004) What success factors are important to small business owners? *International Small Business Journal*, 22(6), 577–594.
- Watson, C., McCarthy, J., & Rowley, J. (2013). Consumer attitudes towards mobile marketing in the smart phone era. *International Journal of Information Management*, *33*(5), 840–849.
- Wolcott, P., Qureshi, S., & Kamal, M. (2007). An information technology therapy approach to micro-enterprise adoption of ICTs. *AMCIS Proceeding*.
- Yamane, T. (1967). Statistics: An introductory analysis. 2nd Edition, New York: Harper and Row.

FACTORS THAT INFLUENCE MINORITY ENTREPRENEURS IN DEVELOPING A BUSINESS

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ABSTRACT

Minority entrepreneurs are categories of people who are distinguished from social majority (for example, ethnic minorities). Minority entrepreneurs are an important source of creation and innovation of employment in the economy in several countries, especially in Indonesia, as well as generate of economic development in their respective communities. However, few understand about unique motivation, the factor that makes them become minority entrepreneurs, business strategies, and plans in the early stages of forming their businesses. The method of measuring factors affecting minorities in entrepreneurship is suggested by Van Den Bergh, Button, Nijkamp, and Pepping (1997) (200 these factors include: Ethnicity; Age; Level of education; job position before becoming an entrepreneur; Experience about business activities; Motivation to start a business; Business sector; Business planning; Sources of information and advice; Sales growth; Benefits; and the level of satisfaction with the business owned. The research is quantitative by exploring the phenomenon found in the object under study. Quantitative was carried out using the method of confirmatory factor analysis. The data obtained will be linked with the theory of ethnic minority entrepreneurs in Bandung, Indonesia. Respondents from this study were entrepreneurs who came from Madurese, Minang, Batak ethnic

Keywords: Minority entrepreneur, factors entrepreneurs, business strategy.

INTRODUCTION

One of the factors behind the arrival of migrants to the city of Bandung is the availability of jobs in this city. The city of Bandung has a variety of activities, so many residents from other regions come to and find work here. In 2017 it was noted that the working age population population aged 15 years and above) in the city of Bandung was 1,932,114 people, consisting of 50.27 percent. The working age population is divided into the workforce and not the workforce. Bandung City Work Force Participation Rate (TPAK) in 2017 was 63.11 percent. This TPAK shows an increase when compared to the conditions in 2015 where the TPAK in Bandung was 62.52 percent.

Migrants in the city of Bandung who come from villages, or regions whose average income is smaller than Kota Bandung, mostly work in the middle economic sector. Migrants who come with this condition see that the industrial sector is not a sector that benefits them. With their background, migrants will end up as laborers in large industries. While they came to Bandung City to improve the family's financial condition. In addition, to enter into large factories, they must go through various recruitment procedures set by the factory. One of them is their domicile in the city of Bandung. As is well known, migrants tend to have a reluctance to deal with civil offices. The increasing number of migrants has made the Bandung City government as close as newcomers.

In addition to the industrial sector, there are also middle and middle and lower middle economic sectors. In this city, there are communities that organize small and medium enterprises. To follow this kind of community does not require long procedures, so migrants can enter easily. The growth in the number of Micro, Small and Medium Enterprises (MSMes) units in Bandung in 2012–2017 is shown in Table 1.

Table 1 shows that from 2012–2017 the number of MSMEs in the city of Bandung continues to increase from year to year. In 2012, the number of MSMEs was 3,291 units and until 2017 the number of MSMEs was 4,077 units. This shows that more and more people choose to open their own businesses as a source of income. MSMEs in the city of Bandung experience growth every year because of the economic growth in Bandung which is quite good. According to Deden Y. Hidayat, Chair of Kamar Dagang Indonesia (KADIN) House of Chamber and Industry Bandung City, "the growth of Micro, Small and Medium Enterprises (MSMEs) in the city of Bandung experienced growth driven by the large absorption of products by the community, especially tourists".

Table 1
The Growth in the Number of Micro, Small and Medium Enterprises (MSMEs) in Bandung City in 2012–2017

Year	Number of MSMEs (Unit)
2012	3291
2013	3397
2014	3498
2015	3544
2016	3764
2017	4077

Source: The Office of Cooperative Micro, Small and Medium Enterprises and Industry Trade in Bandung City

Some of the migrants in Bandung are of the Minang, Batak and Madura ethnic groups. This study uses ethnic variables as one of the important variables. This is related to the reality that the number of entrepreneurial workers is different based on ethnic groups, and also aims to show that workers in choosing jobs are influenced by ethnicity. This is important in order to understand why a particular ethnic group controls the field of work that is not controlled by other ethnic groups. This writing seeks to answer how the characteristics of minority entrepreneurs in the city of Bandung are from the three ethnic groups. Ethnicity; Age; Level of education; job position before becoming an entrepreneur; Experience about business activities; Motivation to start a business; Business sector; Business planning; Sources of information and advice; Sales growth; Benefits; and the level of satisfaction with the business owned.

LITERATURE REVIEW

Entrepreneurship or entrepreneurship Often Also called is interpreted as the characteristics of courage, virtue, exemplary in taking risks originating from their own abilities (Wijandi, 1988). The emergence of entrepreneurship is nothing but a result of imbalances in the labor market. In other words, the workforce that is not accommodated in the formal sector will be faced with two problems, namely, they continue to be unemployed or they have to open their own jobs called entrepreneurship. Not to mention in looking for employment, they have to compete with other workers who have different characteristics. According to (Elfindri & Bachtiar, 2004) Antitrust competition in the same region / country can also occur due to differences in race, language, and level of education. This condition is caused by pressure on the labor market (Bachtiar & Amalia, 2012).

There are various kinds of entrepreneurial profiles put forward by (Zimmerer & Scarborough, 2005):

- a. Women entrepreneur is a woman who is engaged in business. These women work as entrepreneurs because they have a variety of factors that encourage them including wanting to show their achievement abilities, helping the household economy, getting bored with their previous jobs and as housewives.
- b. Minority entrepreneur the existence of minorities in a country makes them have different job opportunities than others. This makes them try to pursue business in their daily activities in order to develop and advance.
- c. Immigrant entrepreneur It is migrants who come to an area. Usually, migrants find it difficult to get a job, so they develop a business as a livelihood.
- d. Part-time entrepreneurs an entrepreneur who starts a business that will be run by filling in the empty time he has as a way to achieve greater effort or just to channel his hobbies.
- e. Home-based entrepreneur Is an entrepreneur who runs his business from home or runs his business from home.
- f. Family own business in a family that develops various types and branches of business by giving up management of their business for generations or only held by their own family members together.
- g. Copreneurs There are divisions in the management of jobs based on their respective expertise. People who are experts in this field are appointed to be in charge of certain divisions of existing businesses.

When individuals decide to become paid workers/ salary workers or open their own jobs, there are two factors that influence it, namely internal factors and external factors. Internal factors originate from the characteristics of the individual concerned, such as age, sex, education, marital status, ethnicity, language skills, population status, and other individual characteristics. While external factors come from characteristics outside the individual's self, such as the economic condition of a country, the number of unemployed, limited employment opportunities and so on (Fairle & Meyer, 1994). In addition, according to Cuervo (2005) the characteristics of individual actors such as psychological aspects and non-psychological aspects also influence individual decisions to become self-employed/entrepreneurial workers. Psychological aspects include the characteristics of independence possessed by individuals, such as motivation and desire for self-independence, while non-psychological aspects include heredity and social environment (Bachtiar & Amalia, 2012).

There's two theories regarding the impetus for entrepreneurship, namely push theory and pull theory (Gilad & Levine, 1986). According to push theory, individuals are encouraged (push) for entrepreneurship due to negative direct incentives such as dissatisfaction with work, difficulty in finding work, inflexibility in working hours or insufficient salary. Conversely, pull theory argues that individuals are interested in entrepreneurship because they are indeed looking for things related to the entrepreneurial characteristics themselves, such as independence, or indeed because they believe entrepreneurship can provide prosperity. But many studies indicate that most individuals become entrepreneurs mainly due to pulling factors rather than push factors (Bachtiar & Amalia, 2012).

Some sociologists argue that more independent/entrepreneurial workers come from migrant groups who do not live permanently in the destination. They come to work with a relatively short time and not stay for longer in the destination. Light (1972) and Sowell (1981) reveal the existence of disadvantage theory in minority immigrant groups in the United States which causes certain groups to tend to become independent workers compared to wage workers. Then (Light, 1984) revealed about cultural theory, that cultural values contained in certain ethnicities could be the reason why people tend to choose to become entrepreneurs. The sources of ethnic culture include the culture of entrepreneurship, the transfer or skill of transmission in the relevant ethnic groups, as well as ethnic group solidarity such as orientation to migrants, networks/ ethnic support organizations both formal and informal.

Minority entrepreneurs are categories of people who are distinguished from the social majority (for example, ethnic minorities). Minority business companies are an important source of creation and innovation of employment in the economy in several countries, especially in Indonesia, as well as generate economic development in their respective communities. However, few understand unique motivation, the factor that makes them become minority entrepreneurs, business strategies, and plans in the early stages of forming their businesses.

RESEARCH METHOD

The research is quantitative by exploring the phenomenon found in the object under study. Quantitative analysis was carried out using the method of confirmatory factor analysis. The data obtained will be linked with the theory of ethnic minority entrepreneurs in Bandung, Indonesia. Respondents from this study were entrepreneurs who came from Madurese, Minang, and Batak ethnic. The total respondents used as many as 90 entrepreneurs in the city of Bandung from when the ethnic groups to be studied included 30 Madura entrepreneurs, 30 Minang businessmen, and 30 Batak entrepreneurs.

FINDINGS

Questionnaire Results

Based on data from 90 respondents, through a list of questions obtained the conditions of respondents regarding the origin of the Tribe, Age, Education Level, Previous Job, Form of Business, Length of Establishment of Business, and Income. Classification carried out on respondents in this study aims to know clearly about the results obtained from the distribution of questionnaires that have been done.

Table 2 Classification of Respondents

		Frequency	Percent
Origin of the Tribe	Batak	30	33.3 %
	Madura	30	33.3 %
	Minang	30	33.3 %
	Total	90	100 %
Age	< 25 year	1	1.1 %
_	25–35 year	11	12.2 %
	35–50 year	65	72.2 %
	>50 year	13	14.4 %
	Total	90	100.0 %
Last Education Degree	Not Educated	0	0
_	SD (Elementary School)	0	0
	SMP (Junior High School)	18	2%
	SMA/SMK (Senior High School)	72	80%
	University/College	0	0
	Total	90	100%
Previous Job	Students	0	0
-	Private employee	20	22.2%

<u> </u>		Frequency	Percent
	Civil Servant	1	1.1 %
	Labour	57	63.3 %
	Others	12	13.3 %
	Total	90	100 %
Form of Business	Industry	1	1.1 %
	Culinary	41	45.6 %
	Trading/Commerce	35	38.9 %
	Convection	0	0
	Service	12	13.3 %
	Others	1	1.1 %
	Total	90	100 %
Duration of Business	< 1 year	1	1.1 %
	1–5 year	49	54.4 %
	6–10 year	40	44.4 %
	> 10 year	0	0
	Total	90	100%
ncome	Below Rp 5.000.000	49	54.4 %
	Rp 6.000.000–Rp 11.000.000	40	44.4 %
	Rp 11.000.000–Rp 15.000.000	1	1.1 %
	Rp 15.000.000–Rp 20.000.000	0	0
	> Rp 20.000.000	0	0
	Total	90	100%

In this study, there are three latent variables each of the latent variables measured by several manifest variables/indicators, amounting to 35 as shown in Table 3.

Table 3
Latent Variables/Factors and Manifest/Indicator Variables

No	Reasons for Starting a Business	No	Business Aspect	No	Business Performance
P1	Experience from other entrepreneurs	P11	Manufacturing Sector	P26	The level of sales continues to increase
P2	Experience from the lesson	P12	Construction Sector	P27	Sales level decreased
P3	Experience because I was a businessman	P13	Wholesale/trade sector	P28	Sales level does not change
P4	Have no experience	P14	Hospitality sector	P29	Profits are increasing
P5	Motivation wants to be a boss	P15	Culinary sector	P30	Profit decreases
P6	Motivation wants to get an award	P16	Repair Sector	P31	Business experience a loss
P7	Motivation because of financial needs	P17	Transportation sector	P32	Business is not profitable
P8	Motivation because you are not satisfied with your previous job	P18	Have a business plan	P33	Satisfied with the business underway
P9	Motivation continues the family business	P19	Structured business planning	P34	Not satisfied with the business being undertaken
P10	Motivation because of unemployment	P20	Unstructured business planning	P35	Feel normal with the business that is being lived
	1 ,	P21	Family gives advice		
		P22	Ethnic colleagues advise		
		P23	Consultant / Bank member advises		
		P24	Employers' Organizations / Business Institutions give advice		
		P25	Ethnic entrepreneurs give advice		

To do this factor analysis, researchers used IBM SPSS Statistics V.23 software, which in the software already provided an application to perform factor analysis. Following exposure to the results of factor analysis:

Testing Variables

The first step in factor analysis is testing variables. This test was conducted to determine whether the variables to be studied as a whole deserves to be analyzed further. Through the Kaiser-Meyer-Olkin (MSA) KMO (a measure of sampling adequacy), the MSA value must be considered in testing this variable, with the numbers that will come out in the KMO-MSA test, which ranges from zero (0) to one (1) with the criteria:

MSA = 1; These variables can be predicted without errors by other variables.

MSA> 0.5; Variables can still be predicted and can be analyzed further.

MSA <0.5; Variables cannot be predicted and can't be analyzed further, or must be excluded from other variables.

Tabel 4
Kaiser-Mayer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.667
Bartlett's Test of Sphericity	Approx. Chi-Square	1431.218
	Df	378
	Sig.	.000

In the Table 4, the calculation of KMO and Barlett's Test, the results of the KMO-MSA (Kaiser Meyer Olkin Measure of Sampling) were obtained for 35 variables, with a value of 0.667, and had a significance value of 0,000 <0.05. Then it can be concluded that all variables can be analyzed further.

Analysis of Communalities

In the Table 5 that shows the value of factors and explains the variant of the indicator, the factors formed are still in the form of one unit so that the role or contribution of each variable or dimension together. The initial value reflects the role or contribution of the constituent variables of the factor, while extraction describes the percentage of roles or contributions of each dimension or sub-variable of individual factors to the factors. The table below shows the always positive values that appear in the Table 5.

Table 5 Communalities

	Initial	Extraction
Experience from other entrepreneurs	1.000	.804
Have no experience	1.000	.666
Motivation to be a boss	1.000	.600
Motivation because you are not satisfied with your previous job	1.000	.482
Motivation continues the family business	1.000	.617
Manufacturing Sector	1.000	.740
Construction Sector	1.000	.836
Hospitality Sector	1.000	.781
Culinary Sector	1.000	.523
Transportation Sector	1.000	.815
Have a business plan	1.000	.801
Structured business planning	1.000	.690
Unstructured business planning	1.000	.865
Family member advice	1.000	.506
Ethnic colleagues advise	1.000	.666
Consultant/bank gives advice	1.000	.836
Employers' Organizations / Business Institutions give advice	1.000	.794
Entrepreneurs are technically giving advice	1.000	.703
The level of sales continues to increase	1.000	.806
Sales level decreased	1.000	.814
Sales level does not change	1.000	.769
Profits are increasing	1.000	.802
Profit decreases	1.000	.836
Business experience a loss	1.000	.522
Business is not profitable	1.000	.834
Satisfied with the business underway	1.000	.601
Not satisfied with the business being undertaken	1.000	.684
Feel normal with the business that is being lived	1.000	.596
Extraction Method: Principal Component Analysis		

Extraction Method: Principal Component Analysis.

In the Table 5 regarding Communalities, it can be seen that all variables can be explained by factors formed with the provisions of the greater Communalities, the closer the relationship between the variables concerned with the factors that will be formed. Providing a similar picture that can be explained in this study, that in the Communalities table, the dimensions of unstructured business planning obtained the highest contribution of 86.50% because entrepreneurs do not pay too much attention or think about their business planning, they only think that their business must succeed and they get enough income or profit even satisfying their lives in the urban city. Whereas for the variable that has the smallest value obtained by the motivation dimension because it is not satisfied with the previous job, being an entrepreneur in a city may be the goal of urbanists, because they assume that finding a job in a city is not easy and at the end they choose to become entrepreneurs most of these urbanists are selling or buying special food from their home cities.

Analysis of Total Variance Explained

In this study, the manifest variables studied amounted to 35, but there were 28 variables worthy of further analysis, the table of total variance below shows the value of each that has been analyzed:

Table 6 Total Variance Explained

Commo	nont		Initial Eigenvalu	es	Extraction Sums of Squared Loadings				
Compo	nent -	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %		
	1	5.819	20.781	20.781	5.819	20.781	20.781		
	2	3.930	14.036	34.817	3.930	14.036	34.817		
	3	2.377	8.490	43.307	2.377	8.490	43.307		
	4	2.153	7.688	50.994	2.153	7.688	50.994		
	5	1.797	6.417	57.411	1.797	6.417	57.411		
	6	1.574	5.622	63.033	1.574	5.622	63.033		
	7	1.203	4.297	67.331	1.203	4.297	67.331		
	8	1.134	4.051	71.382	1.134	4.051	71.382		
	9	.964	3.444	74.826					
	10	.867	3.096	77.922					
	11	.803	2.866	80.788					
	12	.737	2.634	83.422					
	13	.636	2.272	85.695					
D'	14	.622	2.220	87.915					
Dimension	15	.576	2.058	89.973					
	16	.402	1.435	91.408					
	17	.376	1.342	92.750					
	18	.305	1.089	93.839					
	19	.301	1.076	94.915					
	20	.256	.913	95.828					
	21	.226	.808	96.636					
	22	.206	.736	97.373					
	23	.197	.702	98.075					
	24	.165	.590	98.665					
	25	.137	.488	99.154					
	26	.107	.382	99.535					
	27	.096	.344	99.879					
	28	.034	.121	100.000					

Extraction Method: Principal Component Analysis.

Riduwan (2011) explained the results of her research which can be applied in this study, namely there are two columns named initial eigenvalues and extraction sums of squared loading. In the variant of the initial eigenvalue, this shows the factors formed, which if all the factors are summed up show the number of variables. In this study sequentially the values obtained were: 5.819 + 3.930 + 2.337 + 2.153 + 1.797 + 1.574 + 1.203 + 1.134 + 0.964 +

0.867 + 0.803 + 0.737 + 0.636 + 0.622 + 0.576 + 0.402 + 0.376 + 0.305 + 0.301 + 0.256 + 0.226 + 0.206 + 0.197 + 0.165 + 0.137 + 0.107 + 0.096 + 0.034 = 28 while the extraction sums of squad loading shows the number of variants obtained, in the output there are eight variants, namely 5.819; 3.930; 2.337; 2.153; 1,797; 1.574; 1.203; 1.134, which means that eight factors are formed which can represent 28 manifest variables in the factors that influence minority entrepreneurs in Bandung. The eight new factors can be formed because they have a value of \geq 1.000.

Scree Plots

Scree plots are graphs that show the relationship between factors with eigenvalue values. Scree plot shape is used to determine the number of factors formed, by looking at the value of the component point that has an eigenvalue> 1. The following is a picture that illustrates scree plots:

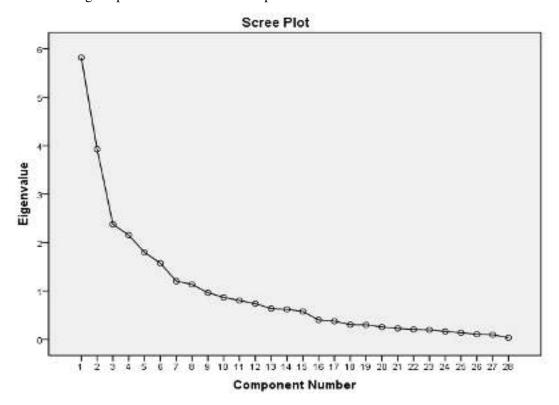


Figure 1. Scree plots

In the Figure 1 of the scree of plot above, it can be seen that there are 8 result points of the new factor formed. So that it can be said that there are 8 new factors formed. The results of this new factor can be seen from the number of component numbers that have an eigenvalue above 1. From the scree plots above, it can be seen that factor one to factor two (the line from the axis of component number 1 to 2), the line drops sharply. This shows that factor one is the most influential (dominant) factor in summarizing the 28 variables seen in the component number.

Component Matrix

The correlation value between the manifest variable and the factors formed is shown by the component matrix. If the value obtained is greater, the correlation is greater. The way to read the table is seen from the variable in the first order and starts by moving from the leftmost factor to the far-right factor, namely the 1st factor to the 8th factor of each row to find the number whose absolute value is the largest in that row. The largest number shows which factor is included in the variable. The Table 7 is the results of the component matrix:

From the Table 7 the component, matrix looks at 28 variables by grouping 8 new factors formed. It can be seen that the correlation value of all of these factors is formed, there are still many that have ambiguous values, judging from all variables only included in the 1st factor and it requires a rotation method to resolve this ambiguous problem.

Tabel 7 Component Matrix

	Component							
-	1	2	3	4	5	6	7	8
Experience from other entrepreneurs	.421	033	.100	-,454	-,453	,451	-,037	,000
Have no experience	415	101	303	,282	,506	-,220	,085	,022
Motivation to be a boss	313	.012	.216	,087	,132	,564	-,311	,125
Motivation because you are not satisfied with your previous job	.188	.381	.411	,120	,044	,018	,010	-,340
Motivation continues the family business	.221	.171	.470	-,343	,055	,209	-,385	-,076
Manufacturing Sector	.427	.598	.176	-,158	,079	-,348	-,116	-,048
Construction Sector	.625	.524	.185	-,095	,005	-,345	-,094	,013
Hospitality Sector	.706	.307	.129	,025	,167	-,225	-,207	,220
Culinary Sector	.426	105	093	-,323	-,369	-,072	,269	,062
Transportation Sector	.541	.604	.079	,022	-,169	-,247	-,151	,196
Have a business plan	.453	134	.575	,418	,133	,195	,105	,073
Structured business planning	.544	.250	.118	,217	-,028	-,120	,446	-,236
Unstructured business planning	.459	062	.432	,596	,180	,180	,189	,089
Family member advice	.557	244	.026	-,039	-,159	,237	,231	-,006
Ethnic colleagues advise	.564	007	.037	-,171	,045	,362	,298	,309
Consultant / bank gives advice	.528	.314	503	-,004	,296	,332	-,090	-,010
Employers' Organizations/Business Institutions give advice	.422	.394	501	,144	,290	,223	-,099	-,213
Entrepreneurs are technically giving advice	.471	.345	377	-,110	,385	,212	-,006	,120
The level of sales continues to increase	.610	540	250	-,108	,002	-,095	-,084	-,228
Sales level decreased	338	.607	141	,380	-,349	,087	-,039	,188
Sales level does not change	402	.365	.233	-,450	,219	-,061	,349	,209
Profits are increasing	.653	526	226	-,143	-,019	-,114	-,045	-,109
Profit decreases	268	.550	320	,340	-,389	,117	-,036	,279
Business experience a loss	.263	.324	501	,013	-,178	,041	,249	-,025
Business is not profitable	523	.406	.122	-,412	,238	,044	,384	,074
Satisfied with the business underway	.404	434	.018	,423	,050	-,075	,125	,217
Not satisfied with the business being undertaken	165	.355	.023	,312	-,474	,087	,069	-,443
Feel normal with the business that is being lived	207	.412	.082	-,065	,284	,251	,140	-,457

Extraction Method: Principal Component Analysis.

Factor Rotation

Factor rotation is useful to ensure that a variable is included in which group of factors, it can be determined by looking at the largest correlation value between the variables with the formed factor (component). Following is the table of results of factor rotation.

Table 8
Rotation Factor Rotated Component Matrix

	Component							
-	1	2	3	4	5	6	7	8
Experience from other entrepreneurs	.043	.092	068	074	055	.876	112	.025
Have no experience	279	.113	037	.106	036	735	.087	118
Motivation to be a boss	270	.032	.165	.097	.096	.011	692	.034
Motivation because you are not satisfied with your	.362	026	.015	.078	.236	.028	090	.528
previous job								
Motivation continues the family business	.379	036	223	.075	018	.327	527	.176
Manufacturing Sector	.818	.143	010	.123	035	.028	.079	.164
Construction Sector	.868	.161	025	005	.097	.136	.145	.090
Hospitality Sector	.760	.271	102	142	.257	.070	010	166
Culinary Sector	.116	.010	126	056	034	.542	.417	147
Transportation Sector	.810	.179	.275	053	.078	.179	.099	030
Have a business plan	.157	084	131	133	.829	.107	168	.087

a. 8 components extracted.

	Component							<u>.</u>
	1	2	3	4	5	6	7	8
Structured business planning	.323	.168	027	013	.446	.130	.478	.334
Unstructured business planning	.125	.042	009	160	.900	023	056	.087
Family member advice	036	.161	208	201	.338	.493	.192	040
Ethnic colleagues advise	.073	.370	134	.137	.402	.514	.067	236
Consultant / bank gives advice	.162	.885	.001	129	.024	.097	011	003
Employers' Organizations/Business Institutions give	.173	.820	.069	184	010	081	.047	.209
advice								
Entrepreneurs are technically giving advice	.250	.784	063	.077	.046	.051	.003	105
The level of sales continues to increase	006	.188	563	573	.013	.219	.254	109
Sales level decreased	.064	.025	.879	.094	071	113	032	.098
Sales level does not change	.073	110	.005	.854	143	035	012	031
Profits are increasing	.044	.177	546	523	.050	.273	.278	210
Profit decreases	.013	.139	.891	.028	126	046	.035	046
Business experience a loss	.064	.461	.277	033	103	.168	.432	.035
Business is not profitable	078	022	.065	.872	210	088	010	.106
Satisfied with the business underway	052	007	137	387	.545	049	.193	306
Not satisfied with the business being undertaken	039	130	.503	134	053	.075	.137	.606
Feel normal with the business that is being lived	054	.236	004	.372	053	123	128	.604

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Component Transformation Matrix

The Component Transformation Matrix table serves to show whether the factors formed already have another correlation with each other or orthogonal. The Table 9 is the results of the Component Transformation Matrix.

Tabel 9 Component Transformation Matrix

Component		1	2	3	4	5	6	7	8
	1	.500	.397	295	380	.380	.412	.208	059
	2	.553	.545	.321	.409	117	043	032	.331
	3	.287	174	.616	.258	.471	.148	378	.234
Dimonsion	4	107	013	.461	.583	439	475	.044	.125
Dimension	5	.029	.431	509	.316	.593	.201	243	049
	6	500	.416	.156	.080	.230	.505	.459	.168
	7	295	.013	017	.517	.379	.123	.692	.088
	8	.109	015	.299	.235	.208	.061	134	.882

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

The Component Transformation Matrix table above shows that correlation values are found in the main diagonal range and above 0.5, which is 0.500; 0,545; 0,616; 0,583; 0.593; 0.505; 0.692; 0.882. This shows that the eight factors formed are correct because they have a high correlation value on the main diagonal, so the six factors formed can be concluded "feasible" to summarize the 28 manifest variables analyzed.

Giving Name Factor and Discussion

Basically, the new factors formed are the initial factors which after analyzing the results merge into new factors. The difference that arises after the new factor is stated turns out to have represented several previous factors. That is, new factors found by researchers can be used for further research that has to do with the factors that factors that affect minority entrepreneurs in Bandung. In essence, new factors that have been found to be more efficient to be used as aspects of assessment in knowing the factors that influence the minority of entrepreneurs in the city of Bandung.

The manifest variable that forms the first factor that has 5.819 eigen values, including Motivation to continue a family business, manufacturing sector, construction sector, hotel sector, and the transportation sector. The first factor is called motivational factors based on business units. The author concludes that urbanists who become entrepreneurs in urban areas, by looking at the industrial sectors available in the overseas cities, are able to take advantage of

a. Rotation converged in 8 iterations.

these conditions. The fact is that indeed in the city of Bandung itself there are many industrial sectors in manufacturing, construction, hospitality, and even transportation. These opportunities are taken by urbanists to open business opportunities around the industrial area, with the aim of continuing the family business that has been undertaken in their hometown.

The manifest variable that forms the second factor, including not having the experience, consultants/banks giving advice, employers' organizations/business institutions giving advice, entrepreneurs as ethnic as giving advice, businesses experiencing losses. The factor that has an eigen value of 3.930 is named the information search factor, because the authors conclude that urbanists do not have experience about becoming entrepreneurs in overseas cities, and in the end some institutions and even ethnic entrepreneurs understand that it is not easy to become an entrepreneur in the city of overseas, and sometimes times both in the city itself or in the city of overseas experiencing losses in conducting business activities is a common thing.

The third factor has an eigen value of 2.377, which is formed by manifest variables including, motivation to become a boss, sales level decreases, profits decrease, these factors are named risk factors, why is that because when an entrepreneur feels he wants to become a boss, he also must be willing to accept when sales and profits decline because not all the time sales and profits can be stable, it takes a long time to make a business say successful with a small percentage of sales and profits decreasing, along with the process of becoming a boss tested.

The fourth factor that becomes the factors that influence the minority of entrepreneurs is formed by the manifest variable the level of sales does not change, and the business is not profitable. Factors that have an eigen value of 2.153, this factor is called a survival factor. Because it is not only products that have a life cycle but also business activities that have a life cycle. Where the business will definitely enter in a situation where the business does not experience an increase or decrease in sales and profits because in essence, the situation illustrates that the important thing is that the business that is undertaken is able to survive and will definitely pass through the cycle.

For the fifth factor that is formed as an eigen value of 1.797, which consists of variables having business planning, unstructured business planning, and being satisfied with the business being undertaken, this factor is named the business unit planning factor. The fact is that when business activity has planned and even planning is considered unstructured, it is able to influence the end result that will be achieved or obtained by an entrepreneur. Because with a plan the maturity of business activity can be measured, and as an urbanist who becomes an entrepreneur in a foreign city certainly has a business plan that will be undertaken

Then the sixth factor consists of experience variables from other entrepreneurs, the culinary sector, families give advice, ethnic colleagues give advice, which has an eigen value of 1.574 named the strongest push factor. In choosing a business unit in the culinary sector an entrepreneur urbanist must-see based on the experience of other entrepreneurs who run business units in the same sector. In addition, an entrepreneur will ask for encouragement or support from the people closest to achieving business goals.

The seventh factor formed has an eigen value of 1.203, which consists of structured manifest planning variables, the level of sales continues to increase, profits increase, this factor is named the maturity factor of the business unit. That in reality, if a business has a very mature plan, it will affect the future of the business undertaken. The more mature the planning, the future of the business can be predicted to be more successful, because with a plan an entrepreneur is ensured that he has been lame about how the business began, how to develop the business, starting from what type of business will be run, which target market to achieve, how the selling price will be issued as well as what an effective and efficient marketing strategy for the business that will be run.

For manifest variables that are formed in the 8th factor, among them motivation because they are not satisfied with the previous job, are not satisfied with the business being undertaken, and feel normal with the business that is being undertaken. This factor has an eigen value of 1.134 which will be named the factor of dissatisfaction. The reason an urbanist becomes an entrepreneur in an overseas city is one of them is because he is not satisfied with their work in the city of origin, with the intention of changing destiny, but sometimes when making a decision to become an entrepreneur in the city, the results obtained are not always satisfying and possible occasionally the results obtained are considered the same as the work first in the city of origin. That is one of the consequences or risks that must be accepted when deciding to become an entrepreneur in a foreign city.

Tabel 10 Factor Naming

Factor	Eigen Value Score	Variable	Factor's Name
1	5.819	Motivation continues the family business, manufacturing sector, construction sector, hotel sector, the transportation sector	Motivation Factors based on Business Units
2	3.930	Not having the experience, Consultants / Banks give advice, Employers' Organizations / Business Institutions give advice Ethnic entrepreneurs give advice	
3	2.377	Motivation wants to be a boss, sales level decreases, profit decreases	Risk Factors
4	2.153	Sales level does not change, business is not profitable	Survival Factor
5	1.797	Having a business plan, Unstructured business planning, Satisfied with the business being undertaken	Business Unit Planning Factors
6	1.574	Experience from other entrepreneurs, culinary sector, family giving advice, colleagues from all ethnic groups	Strong Push Factor
7	1.203	Structured business planning, Sales levels continue to increase, Profits are increasing	Business Unit Maturity Factors
8	1.134	Motivation because it is not satisfied with the previous job, Not satisfied with the business being undertaken, feeling normal with the business that is being undertaken	Factor of Dissatisfaction

CONCLUSION

New factors that have been found to be more efficient are used as aspects of assessment in knowing the factors that influence minority entrepreneurs in the city of Bandung. Factor 1 is a motivation factor based on a business unit consisting of motivation to continue the family business, manufacturing sector, construction sector, hotel sector, and the transportation sector.

Factor 2 is given the name of the information seeking factor, consisting of having no experience, consultants/banks giving advice, employers' organizations/business institutions giving advice, entrepreneurs as ethnic as giving advice, businesses experiencing losses.

The third factor is the risk factor, which is formed by manifest variables including motivation to become a boss, the level of sales decreases, profits decline.

The fourth factor, which is the defensive factor which becomes a factor that influences the minority of entrepreneurs, is formed by the manifest variable, the sales level does not change, and the business is not profitable. For the fifth factor is the business unit planning factor which consists of variables having business planning, unstructured business planning, and being satisfied with the business being undertaken. Then the sixth factor, the strong push factor consists of experience variables from other entrepreneurs, the culinary sector, families give advice, ethnic colleagues give advice. The seventh factor, the business unit maturity factor which consists of structured manifest planning variables, the level of sales continues to increase, profits increase.

For manifest variables that are formed in the 8th factor, namely the dissatisfaction factor which consists of motivation because it is not satisfied with the previous job, is not satisfied with the business being undertaken and feels normal with the business being undertaken.

REFERENCES

Bachtiar, N., & Amalia, R. (2012). Analisis faktor-faktor yang mempengaruhi motivasi berwirausaha di kota Pekanbaru. *Jurnal Kependudukan Indonesia*, *VII*(1), 93–114.

Cuervo, A. (2005). Individual and environmental determinants of entrepreneurship. *International Entrepreneurship and Management Journal 1*, 293–311.

Elfindri, & Bachtiar, N. (2004). Ekonomi ketenagakerjaan. Padang: Andalas University Pers.

Fairle, R., & Meyer, B. (1994). *The ethnic and racial character of self-employment*. NBER Working Papper Series. Gilad, B., & Levine, P. (1986). A behaviour model of entrepreneurial supply. *Journal of Small Busniness Management*, 24, 45–53.

Light, I. H. (1972). *Ethic enterprise in America: Business and welfare among Chinese, Japanese, and Blacks.* Berkeley, CA: University of Californis Press.

----- (1984). Immigrant and ethnic enterprise in North America. Ethnic and Racial Studies, 7(2), 195–216.

Riduwan. (2011). Cara menggunakan dan memakai path analysis. Bandung: Alfabeta.

Sowell, T. (1981). Ethnic America: A history. New York, NY: Basic Books.

Van den Bergh, J. C., Button, K. J., Nijkamp, P., & Pepping, G. C. (1997). *Meta-analysis in environmental economics*. Dordrecht: Kluwer Academic Publishers.

Wijandi. (1988). Pengantar kewiraswastaan. Bandung: Sinar Baru.

Zimmerer, T. W., & Scarborough, N. M. (2005). *Essentials of entrepreneurship and small business management.* 4th Edition. Upper Saddle River, NJ: Prentice Hall.

MORATORIUM OF SACRED TEMPLE AREA AS A TOURIST ATTRACTION

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ABSTRACT

The main problem in this study is how form of arrogant attitude of management and local communities in the in sacred temple area in Bali? How the effectiveness of the moratorium policy can save the sacred temple area in Bali? This research uses empirical research and analysis facts in society with legal theory, policy concepts, the concept of moratorium, the concept of tourism. The research location is in Bali, using primary and secondary legal sources. The technique of collecting data uses observation, interviews and documentation. Analysis techniques use policy analysis techniques and policy evaluation techniques. The moratorium cycle is a cycle that is between the cycle of stagnation and rejuvenation cycle/ cycle of decline. The moratorium cycle can provide a break (time lag) for tourist attractions, especially the sacred temple area to return to the starting point. Back to the vision and mission of tourist attraction, fix the management of the sacred temple area as a tourist attraction, not closed the sacred temple area from religious activities but temporarily closes the sacred temple area from tourism activities.

Keywords: Tourism, moratorium, attraction.

INTRODUCTION

Bali Province is part of the Unitary State of the Republic of Indonesia and Bali has cultural potential as a superior product of tourism. Balinese cultural tourism is closely related and cannot be separated from Hindu religious activities and Hindu philosophy. Tourism activities that move massively have transformed agrarian life patterns into tourism service industries. Local society are competing to build tourist attraction that relies on cultural assets and local wisdom, trying to explore new potentials according to the 4A method (attraction, accessibility, amenities, and ancillary) and use of the sacred temple area as a tourist attraction.

Temples in Bali are one of the cultural tourist attractions that are in great demand by tourists, so that there are quite a number of temples in the sacred temple area of Sad Kahyangan, the sacred temple area of Dang Kahyangan and the sacred temple area of Tri Kahyangan which are a tourist attraction. the sacred temple area of Kahyangan Jagat Temple in every regency in Bali also doesn't escape the development of tourism. This opportunity provides two impacts, namely positive impacts and negative impacts. The positive impact of tourism activities in the sacred temple area provide alternative economic benefits for local communities, opening up the horizons mind of society and tourism making villages more independent. The negative impact of tourism activities is tourism planning that isn't in accordance with government provisions in Spatial and Regional Planning in Bali Province in the sacred temple area will destruct of the temple's sanctity radius that is considered sacred by the Hindu community in Bali.

Local community began competing to seize opportunities in the tourism industry. All kinds of opportunities will not be missed, so that action arises outside the boundaries of the tourism code of ethics, namely the exploitation of tourist attractions and arrogant attitudes. This study analyses two problems, namely the form of management exploitation of the sacred temple area, the local community arrogance towards the sacred temple area and the effectiveness of the moratorium policy in saving the holy area of the temple in Bali. The purpose of this study is to provide an overview for world tourism stakeholders that the dual use of sacred temple area into tourism areas such as blades, tourism can prosper society and tourism also damage life and socio-cultural and religious order if not managed in a harmonious and sustainable.

The urgency of this study for analyzing the two temples has several reasons. First, according to Bali Province regional regulation Number 16 of 2009 concerning Bali Province Spatial and Regional Plans for 2009–2029, Article 1 Paragraph 41, that the sanctuary area is "the area around the temple which needs to be kept clean and holy purity within a certain radius according to the temple status as stipulated in Bhisama Kesucian Pura Parisadha Hindu Dharma Indonesia Pusat (PHDIP) in 1994". It means, the sacred temple area should be free from the anarchist activities, acts of arrogance, exploitation and things that are negative, particularly at odds with the norms of decency, norm of morality, norm of law and norm of religion. Second, negative news or issue was published through digital media that damaged the image of Bali tourism. Third, boycott action was carried out by travel agents so that it had

an impact on other tourism businesses around the sacred temple area. Fourth, tourism in the sacred temple area experience a decline phase so that mean tourism will go into paralysis.

LITERATURE REVIEW

The Concept of Moratorium

A moratorium is a suspension, delay or termination of a certain activity within a specified time period. The moratorium phase is not included in the tourism cycle. A moratorium arises in the phase of stagnation where tourist attraction must choose will lead to the rejuvenation phase or the decline phase (Sanjiwani & Pujani, 2017b). A tourist attraction requires a pause so that it can carry out self-monitoring and evaluation so that it can get out of the crisis period. During the moratorium phase, tourist attraction will have a detrimental effect on local community incomes, resulting in a deterrent effect for exploiters, arrogant actors and other actors as a source of the causes of a crisis of tourist attraction. The moratorium can only be done if government policies provide results that are not in accordance with what is expected, the crisis of trust from the public and employers towards the government and uncontrolled community.

The Concept of Sacred Temple Area

The sacred area must be guarded from all profane matters, the sacred area is an area free from profane activities and intended for religious activities. If tourism enters the sacred area, tourism will adjust to the holy area, not the sacred area that adapts to tourism. Tourism activities in the sacred area are limited to a visit, tourists are not permitted to carry out religious activities that can dissolve the sacred value of a temple (Sudiarta, 2011). The decision of the Central Parisada Hindu Dharma Indonesia Number 11/Kep/I/PHDIP/1994 (Parisada Hindu Dharma Indonesia, 1994) which contains the radius of chastity which is divided into several types of temples, namely:

- a. Sad Kahyangan Temple
 Sad Kahyangan Temple has a radius of chastity at least Apeneleng Agung or equivalent to 5.000 meters from the outside of the temple wall.
- b. Dang Kahyangan Temple
 Pura Dang Kahyangan has a radius of chastity at least Apeneleng Alit or equivalent to 2.000 meters from the outside of the temple wall.
- c. Kahyangan Tiga Temple and other temples
 Kahyangan Tiga Temple and other temples have a purity of purity, at least Apenimpug/ Apenyengker or
 equivalent with sacred area is only inside the temple wall area.

The Concept of Tourist Attraction

According to the Republic of Indonesia Law Number 10 of 2009 concerning tourism, tourist attraction is anything that has a uniqueness, beauty and value in the form of natural, cultural, and human made diversity that is the target or destination of tourist visits. Generally, in Indonesia, and refer to the law, tourist attraction divided into three parts, namely natural tourist attraction, cultural tourist attraction, and artificial tourist attraction. Cultural tourist attraction is Everything that is unique, beauty and value based on culture such as historical objects, traditions, art and everything inherent in the life of a society. Temple classified into tourist attraction culture where there is a combination cultural value and spiritual value. This uniqueness can only be found on the island of Bali.

RESEARCH METHOD

This research was conducted in a sacred temple area that has complex problems and every place has different problems. The temples which is the main point as the location of this research is:

1. The sacred temple area of Sad Kahyangan which is represented by Besakih Temple. Pura Besakih is a temple located at the foot of Mount Agung, precisely located in Besakih Village, Rendang District, Karangasem Regency, Bali. Besakih temple is the highest position in Bali, because it became the center of Hindu religion in Bali.





Picture 1. Besakih temple Source: www.google.com

2. The sacred temple area of Kahyangan Jagat represented by Tirta Empul Temple. Tirta Empul Temple is located in the village of Manukaya Village, Tampaksiring District, Gianyar Regency. Tirta Empul Temple is a temple that has a holy spring water for source life and spiritual of community in Bali.





Picture 2. Tirta Empul temple
Source: www.indonesia.travel/shuttherstock

The scope of this research is the form of exploitation activities carried out in the sacred temple area, acts of arrogance of the local community, and moratorium policy to protect the sacred temple area. The scope of this research is an effort to reinforce the scope of research problems so that the data aspects become clear and there are no biased or distorted discussions.

This research is categorized as a qualitative research (Bungin, 2007). The types of research data sources derived from primary data (main data obtained from informants) and secondary (data that supports primary data) (Bungin, 2003). Data collection techniques using observation, interview and documentation techniques. The technique of determining informants in this study uses purposive sampling, determining the informants who are in accordance with the criteria and competent for the problem of this research. The data analysis technique used is a qualitative data analysis technique with an inductive logic approach, where the data obtained in the field will lead to general conclusions.

DISCUSSION

Overview of The Sacred Temple Area in Bali

The first impression of tourists on Bali tourism is an island that is able to combine a spiritual base with a cultural base as a unique value. These things are reflected in religious activities, customs, and behavior or patterns of life and community behavior. The sacred temple area in Bali is mostly at exotic points of nature. The combination of temple architecture and nature has a strong allure for tourists. The main temple in Bali is located in the sacred temple area of

Sad Kahyangan and Dang Kahyangan, the whole people/ Hindu society in Bali is carried out the prayer/ puja/ worshiped at the temple. It's different from Tri Kahyangan Temple which is worshiped by local people according to the boundaries of traditional villages. The temple which has general characteristics as a place of worship for Ida Sang Hyang Widhi and the function of the temple which has a special function that is needed by the Hindu community in Bali. This generally classified temple is worshiped by all Hindus, so often called the Kahyangan Jagat Bali Temple.

Temple is a tangible cultural heritage that meets the criteria of Balinese cultural tourism. Sad Kahyangan Temple developed as a leading tourist attraction in the regency area, the outstanding value of the attraction is that there is philosophical value, socio-cultural value and religious value, so that tourists get a lot of experience in traveling. The term temple with the meaning as a sacred place of worship of the Balinese Hindu community was used after the Krisna Kepakisan Dynasty around the seventeenth century. The characteristics of temples in Bali generally have three parts, in accordance with Bhisama PHDI (Arniati, 2015), namely:

1. Nistaning Mandala

Nistaning Mandala is the outermost part of the temple, where the outermost side of the temple is equated as the most profane valued area compared to the other parts of the temple.

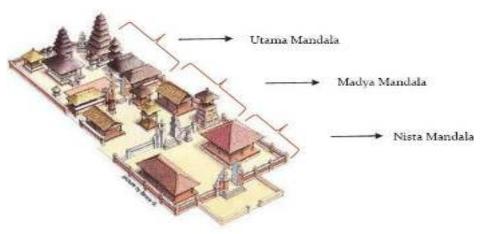
2. Madianing Mandala

Madianing Mandala is the middle part of the temple, where this part is a transitional part, which has a medium sacred value. This area is also a semi-profane zone.

3. Utamaning Mandala

Utamaning Mandala is the most sacred part compared to other parts of the temple, because in this area there are buildings or statues of gods that will be worshiped and believed to be the place of dwelling God.

Bagan Pura



Picture 3. Tri mandala concept

Source: www.google.com

Besakih Temple is a part of Sad Kahyangan Temple in Bali. PHDI regulating in Bhisama about Sad Kahyangan Temple has a sanctity radius of at least Apeneleng Agung or equivalent to 5,000 meters (5 km) from the outside of the temple wall. Tourism activities in Besakih Temple are in the entire Mandala area. Tourist activities are limited to visiting and walking around looking at the temples of Besakih, to be able to get around the temple, tourists are required to use light traditional clothing, such as wearing a sarong and a scarf at the waist. They want knowing the history and philosophy of the temple, structuring temples and the meaning of each temple.

Tirta Empul Temple is a part of Kahyangan Jagat, special temple in obtaining holy water for all forms of ceremonies in Bali. Tourism activities are in the Madianing Mandala and Nistaning Mandala areas. Tourist activities piled up in the Madianing Mandala area, they did *melukat* activities mingling with the Balinese Hindu community who did religious activities. *Melukat* activities also require tourists to use traditional clothing. Most of the tourists do activities without doing sacred procession which is usually done by Hindu communities in Bali. The activities of *melukat* are not bathing activities in the Pura but the activities of *melukat* are activities carried out with sacred processions first, then wash themselves with holy water who have been prayed for with holy spells.

Exploitation of The Sacred Temple Area as a Tourist Attraction

Tirta Empul Temple is a very complex, a temple sanctified temple for Balinese people, a temple with a status of cultural heritage and temples that are used as tourist attractions. Pura Tirta Empul as a holy water source in carrying out religious ceremonies for Hindu people in Bali. Pura Tirta Empul is designated as a cultural heritage so that it becomes the main point of education, research and is protected by the Regional Government. Cultural heritage magnetic and exoticism of Balinese culture makes Pura Tirta Empul a superior tourist attraction of Bali. The three things above make Pura Tirta Empul become one of the most densely packed temples in operational. The effect of global tourism, the power of social media in promoting and digital marketing is change in the sacred function of the temple to be of economic tendency. Local communities and the government began to try to find other potential that could be developed in the Tirta Empul Temple. In the past, tourists only came to visit and enjoy the Nistaning Mandala area and the Madianing Mandala area of Pura Tirta Empul, observe the temple from the outer side and listen to the history of the temple from the tour guide. Over time, tourists took part in *melukat* activities in the Madianing Mandala Pura area. *Melukat* is self-cleaning activities through the medium of water flowing from a holy spring, washed throughout the body with the belief that it has the ability to purify the mind, body and spirit (Mahardika, 2018).

Different tourist cultures lead to different patterns of behavior in assessing a custom, tradition and other cultures. Melukat is the Lifestyle of Traditional Balinese People again glimpsed as a new lifestyle for the metropolis (Anandhi, 2016). For tourists who are not Hindu, they prioritize the sensation of *melukat* rather than believing in spiritual values. In contrast to the Hindu community in Bali, they carried out *melukat* activities by performing sacred processions of Hinduism. Tourist visits with capacities considered to be over quota bring changes to the sacred values of Pura Tirta Empul to shift towards profane values. Management's actions in freeing tourists to participate in *melukat* activities in Tirta Empul Temple became one of the main factors in changing the sacred values shifting to profane values. This shift in value is judged from the obedience of tourists obeying Hindu religious regulations in conducting activities in the Pura, namely in the Cuntaka condition, the public is prohibited from entering the Pura. The Cuntaka condition is as follows:

- 1. There is a prohibition on entering the temple area for women who are menstruating;
- 2. There is a prohibition on entering the temple area for those who are in mourning (one of their relatives dies);
- 3. There is a prohibition on entering the temple area for mothers who are breastfeeding;
- 4. There is a prohibition on entering the temple area for people who are experiencing injuries (there should be no blood droplets in the temple area)
- 5. There is a prohibition on entering the temple area for parents who have a baby before one month seven days from the baby's birth day.

There are still many other rules that must be obeyed, from the five rules above according to the Hinduism. Temple management will not be able to control tourists in obeying these regulations. The above restrictions should be applied, adhered to and supervised by tour guides too. Temple management cannot check one by one and assess the honesty of tourists in obeying the above restrictions because too many tourists visiting this temple in one day. Supervision carried out by the local community and management of the Tirta Empul Temple for tourist activities and the management's performance was not carried out to the maximum (Sumaeni & Mahagangga, 2018). The community considers that supervision of performance is the duty of the local government because there are two managers in a tourist attraction.

Tourism activities have caused the behavior of local communities and temple management to lead to exploitative behavior. Exploitation means that the political use of arbitrarily too much on something subject to exploitation is only for economic interests solely without consideration of propriety, justice and welfare compensation (Sanjiwani & Pujani, 2017a). The exploitation activities that occur in the temple of Tirta Empul are:

- Use of the Madianing Mandala area as a center for tourist activities
 Madianing Mandala is an area that is more sacred than Nistaning Mandala, where people who want to enter the Madianing Mandala area must use traditional clothing and this area is an area for religious activities.
- 2. The quota of tourists who engage in *melukat* activities is not limited so that the influx of tourists influences the activities of the Balinese Hindu community in carrying out religious activities.
- 3. The bathing pool which should be sacred for the activities of the Balinese Hindu community in purifying themselves through religious rituals first becomes irregular and freely accessed without ritual by tourists.

Cultural heritage requires tourists who are exclusive, in the sense that tourists are tourists who value cultural heritage and prioritize education from cultural heritage. It is very difficult in separating religious functions and values from tourism. The uniqueness of the culture that merges into one with Hinduism makes uniqueness available with universal values that can only be found in Bali. The number of tourists who exceed normal capacity will be very dangerous for the sustainability of cultural heritage, over quotas of tourists will be very difficult to monitor, both from attitude and behavior. Travel agents are required to participate in the preservation of cultural heritage and realize sustainable tourism. They must be able to changing the high number of tourists not as threat to the sacred area of Tirta Empul Temple.

Arrogant Action of Local Community in Tourism Activities in The Sacred Temple Area

The hopes of local community to live better in economic status make them break the norms that apply in society. Arrogant action arises from the dissatisfaction of local people, especially local guides in fulfilling their daily needs. The arrogant actions of local people in Sacred Area Besakih Temple began in 2012 until now. This arrogant action was practiced by the local guide Sacred Area Besakih Temple. The disappointment of tourists for this arrogant attitude was poured on electronic media such as Trip Advisor, social media, e-commerce application review and personal blogs so that the effects of these disappointments quickly spread. Since this issue has become hot in the media, local community and community leaders are reluctant to be invited to dialogue. They seem closed and try to avoid the media, academics/ researchers, and the government.

Tourists can only complain to travel agents or tourism businesses around Besakih Village and outside Besakih Village. Their complaints are difficult to convey to the management of Besakih Temple because of the closed attitude they show. The forms of complaints expressed by tourists include:

- 1. Coercion the amount of donations set at USD 250;
- 2. Purchase of entrance tickets does not include parking, sarong rental and tour guide services;
- 3. Coercion using local guide services for tourists;
- 4. Prohibition of outside guides to enter the Besakih Temple area;
- 5. Most European tourists are charged 10 EURO charges for guide services that are personally negotiated by the local guide.

Local guides take extortion actions when they are outside the supervision of the Besakih Temple management. The form of extortion in the payment of guide fees is carried out when it is finished delivering tourists or before carrying out guiding services.

The safety, comfort and trust of tourists is very important to obtain and maintain so that tourists, both domestic and foreign tourists, still come to visit or take a repeater trip. Quite a lot of international tourists who cried due to running out of money after visiting the Sacred Area Besakih Temple. Most of their sadness was expressed to tourism businesses visited after visiting the Sacred Area Besakih Temple. The act of extortion is truly beyond the expectations of tourists. The travel agent has given a warning but there are always gaps for extortion. The arrogant action causes a series of adverse effects for some parties such as:

- 1. Action boycotting travel agents in the form of not bringing tourists to visit Besakih Temple so that local people experience a decline in income
 - Travel agent protested by removed the Sacred Area Besakih Temple tour package from their tour package list. The Travel Agent doesn't bring tourists to the Sacred Temple Besakih Temple in a long time.
- 2. The occurrence of latent conflict towards tourism activities between local communities and tourism entrepreneurs (travel agents and tour guides from outside parties) and Regional Governments

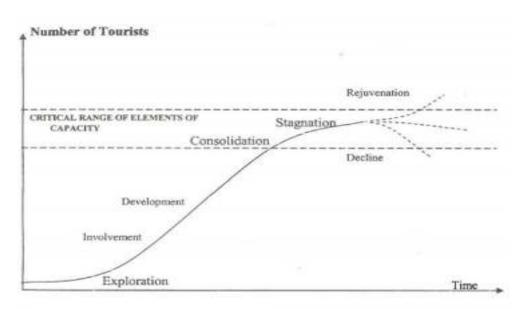
 Travel agents experience conflicts with local guides due to continuous negative reviews of tourists, thus giving a
 - bad track record to their business. The Regional Government's policy in disciplining local guides did not get a response at all.
- 3. Tourism entrepreneurs around Besakih Village and outside Besakih Village become quiet and the income decreases from the lack of tourist visits
 - Tourists who come to visit the Sacred Area Besakih Temple will be visit tourism businesses around Besakih Village such as restaurants and rafting, usually these activities become tour packages offered by travel agents. Automatically, the boycott will also affect the tourism business.

The efforts made by tourism stakeholders in approaching local communities have failure. People in other villages always try to invite the elite and traditional leaders of Besakih Temple to meeting together. They tried to find solutions to negative tourism issues, but the results were nil. Focus group discussion in 2016 on the Design of Tourism in Karangasem Regency held at Maha Giri Restaurant, Rendang also invited adat leaders, Pura besakih managers (before the Pura Besakih had management (MO)) and the elite of Besakih Village, but the result is failure. Not one invitation from Besakih Temple came to attend the Focus Group Discussion. The Tourism Village in Karangasem Regency is restless because the main tourist attraction of Karangasem Regency is the main symbol of other tourist attractions. A symbol will give the first image or first impression that is very important to foster a sense and desire to explore Karangasem Regency.

Moratorium Policy for Protecting the Sacred Temple Area in Bali

The government's policy goals are efficiency, equity and security. Government policies can be felt positively or negatively for policy recipients, depending on how deeply they benefit from the object of policy. Government policies must prioritize public interests rather than certain individuals and groups. Tourism policy needs to pay attention to a number of things, especially in the four pillars of tourism development. The development of tourism destinations is the main basis in take on policy for arrogant and exploitation action in the sacred temple area. This is an important consideration in maintaining the stability of the tourism cycle so that it does not reach saturation.

The cycle of tourism movements is not lasting, they experience progress and setbacks such as amplitude waves. Stakeholders must be able to see opportunities and read changes in circumstances. The habit of local people in carrying out arrogant and exploitative actions has a basis in economic value so that the more people become complacent about the economic value, the stronger the arrogant behavior and exploitation is carried out. The arrogant and exploitative action making tourism trapped in shackles and then becomes an acute problem that is difficult to resolve. Arrogant and exploitative actions can lead to tourist attraction in a crisis. The crisis situation is able to cripple tourism in a gradual time if it is still in the prod moral crisis stage but it will be very difficult to recover if it has entered the acute crisis / chronic crisis stage.



Picture 4. Tourism cycle Source: www.google.com

When a tourist destination is in the cycle of stagnation (stagnation), then there will be two choices, namely:

- 1. Letting tourist attraction to be abandoned by tourists and entering the decline phase;
- 2. Moratorium for rejuvenation on sacred temple area as a tourist attraction.

Arrogant and exploitative actions can be suppressed by good communication such as focus group discussions involving all levels of society and policy holders. If the resolution of the problem cannot be communicated again, the attitude taking will be carried out as a form of government policy. The firm attitude of the Regional Government as a chain breaker from arrogant actions and exploitation practices is a moratorium on the sacred region as a tourist

attraction. Moratorium of sacred temple area is the best way to be able to suppress exploitation activities, arrogant actions and negative issues or negative images that have always haunted the Sacred Temple Area and has a wide-spread impact. Negative imagery has a widespread impact on tourist attraction and tourism businesses around the sacred temple area.

There are quite a lot of tourist attractions that undermine their intention to carry out the moratorium. Several reasons stated include fear of losing the popularity of tourist attractions, the emergence of new superior competitors so that tourist attraction will be difficult to get back up, job and livelihood losses, and reluctant to conduct monitoring and evaluation of systems that have worked. The main tourist attraction in an area is too lulled by tourism and it is difficult to see weaknesses and measure oneself. There needs to be a joint commitment in self-improvement to save tourist attraction from a crisis. Every tourist attraction requires a break in fixing itself and requires space in restoring a situation that is saturated with tourism activities. The form of the moratorium taken in the two types of problems above is:

- 1. Moratorium of the sacred area Besakih Temple
 - The closure while sacred area besakih temple from the tour activities in total. The aim is to restore the function of the Pura Besakih as a center of Hinduism and provide a deterrent effect for local guides. This temporary closure is done to correct a number of things as follows:
 - Providing education to local communities about sustainable tourism and changing the mind set of local communities in instil understanding cultural tourism;
 - Improving the management system in tour guides, updating standard operational procedure (SOP) and requiring certification for local guides;
 - Suppress negative images by restoring the positive image of the sacred area Besakih Temple through positive
 activities with the aim of avoiding a crisis situation;
 - Restoring the sense of security and comfort and trust of tourists in the sacred area Besakih Temple;
- 2. Moratorium of the sacred area Tirta Empul Temple

The moratorium on the sacred area of Pura Tirta Empul was not carried out in total but only in for the *melukat* activities. There needs to be more mature consideration from the management of the temple and the local community in utilizing the Madianing Mandala for tourism activities.

This moratorium is carried out to fix a number of things as follows:

- Restoring the function of the Madianing Mandala as a sacred area to do activities in accordance with the rules
 of Hinduism.
- Considering changing places for tourists to do malukat activities outside the area of the Nistaning Mandala. Tourists can still do *melukat* activities with different locations from Hindu community in Bali.
- Avoid mass tourism that can threaten changes to cultural heritage sites.

CONCLUSION

A problem that continues to occur and experience omission will be difficult to resolve so that it has a negative impact on both the internal and external tourist attractions. The sacred area of tourism has two choices in a state of stagnation or crisis, namely letting tourist attraction to be abandoned by tourists and entering the decline phase or moratorium for rejuvenation on sacred temple area as a tourist attraction. It is important to understand that the moratorium offered is not a permanent halt to the sacred area as a tourist attraction but temporarily stops the sacred temple area from tourism activities. The moratorium policy will not weaken the position of the sacred area as a tourist attraction but the moratorium is used as a medium of evaluation in resolving latent problems, suppressing the seeds of problems so that the sacred area is protected from the tourism crisis. The form of the moratorium taken in the two types of problems above is:

- 1. Moratorium of the sacred area Besakih Temple by shutting down tourism activities to stop arrogant actions from local tour guides and provide a deterrent effect to them;
- 2. Moratorium of the sacred area Tirta Empul Temple by stopping tourist activities to do *melukat* activities, to avoid the sacred values that shift to profane values, and tourist activities are only in *Nistaning* Mandala.

Arrogant and exploitation actions are a weakness of the management of the sacred area in controlling the operation of the sacred temple area as a tourist attraction. Strict rules must be accompanied by strict sanctions, so management needs to hold regular monitoring and evaluation to be able to enforce the rules and impose sanctions on actions that are beyond the limits.

REFERENCES

- Anandhi, I. M. G. (2016). Melukat tourism: Water perspective in the contemporary era. *Journal of Cultural Studies*, *1*(2), 105–109.
- Arniati, I. A. K. (2015). Bhisama Parisada about the sanctity of the temple of interprestation over the sacred zone of Uluwatu Temple. *Dharmasmrti Journal*, *XIII*(26), 100–112.
- Badung District Regulation number 26 concerning the 2013–2033 Badung District spatial planning (2013).
- Bungin, B. (2003). Qualitative research data analysis. Jakarta: PT Grafindo.
- ----- (2007). Qualitative research. Second Edition. Jakarta: PT Prenada Media Group.
- Mahardika, N. (2018). The essence of screaming rituals as a spiritual tourist attraction. *Culture Tourism Journal*, 3(2), 51-61.
- Parisada Hindu Dharma Indonesia (1994). *Decision of Parisada Hindu Dharma Indonesia number:* 11/Kep/I/PHDIP/1994 concerning Bhisama Temple sanctity.
- Regional Regulation of Bali Province number 16 concerning Bali Province spatial planning for 2009–2029 (2009).
- Republic of Indonesia Law number 10 concerning tourism (2009).
- Republic of Indonesia Law number 11 concerning cultural heritage (2010).
- Sanjiwani, P. S., & Pujani, L. P. K. (2017a). *Moratorium of sacred area Besakih Temple as a tourist attraction*. A paper presented in the Seminar of Innovation and Development of Tourism Creative as The Economic Implementation Indonesian Society, Denpasar, Indonesia.
- ----- (2017b). Exploitation of Goa Pindul as speleo tourism in Gunung Kidul, Yogyakarta. *Tourism Analysis Journal*, 17(1), 17–23.
- Sudiarta, I. K. (2011). Determination of sacred temple areas and areas of tourism in spatial planning in Bali. *MMH Journal*, 40(1), 66–72.
- Sumaeni, & Mahagangga. (2018). The management system for Tirta Empul Temple as a heritage attraction in Tampak Siring Gianyar. *Tourism Destination Journal*, 5(2), 322–326.

EMPIRICAL STUDY OF RISK-TAKING ABILITY FACTOR OF STUDENTS' ENTREPRENEURSHIP INTENTION

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ABSTRACT

Entrepreneurship leads to socio-economic transformation. From students' perspective, opting entrepreneurship as career is challenging task because of risk and uncertain future. Several factors trigger Entrepreneurship Intention of students; Risk-taking Ability is one such factor. This study analyzed Risk-taking Ability factor of entrepreneurship intentions of students with reference to selected universities of North-India. Students having Risk-taking Ability were found to have more inclination towards entrepreneurship. According to results of the study, Government University Male students were found to have more Risk-taking Ability than Private University Male students, indicating that Government University Male students are having more Entrepreneurial Intention in terms of Risk-taking Ability.

Keywords: Entrepreneurship, entrepreneurship intention, risk-taking ability.

INTRODUCTION

Entrepreneurship plays an important role for economic growth, employment generation and social development. Entrepreneurship enables society, to generate productive human resource, mobilize and sustain the same in subsequent process of development. Government, policymakers, academic institutions and different organizational bodies are giving emphasis on entrepreneurship development in order to provide support for the budding entrepreneurs. Students and young people can bring drastic change through entrepreneurship. Henry (2003) found that many business graduates are unable to get a job, so there is need to enhance students' entrepreneurship skills to start their own business.

In this particular direction and especially in context of developing countries like India, there is scope of conducting research. The present research study focused on identifying factors affecting entrepreneurship intentions of students of selected universities of the North India region. The study analyzed the effect of risk-taking ability factor of entrepreneurship intentions of students with respect to demographic variables.

LITERATURE REVIEW

One of the reasons to go for entrepreneurship is the utility derived from entrepreneurship as a career alternative. Individuals choose entrepreneurship if the utility derived from this choice exceeds the utility derived from formal employment (Douglas & Shepherd, 2000). Scarborough and Zimmerer (2003) reported that entrepreneurship is an important driver for enhancing economic growth. Kuratko and Hodgetts (2004) showed that there is a significant relationship between entrepreneurship and employment opportunities creation leading to technological change in any financial system.

Venesaar and Loomets (2006) focused on identifying the intentions of students at Tallinn University of Technology to start with business, their personality traits and contextual factors of business environment, including the role of university in supporting students' entrepreneurial intentions. They found that despite the considerable share of respondents thinking about starting a business, most of them do not want to undertake entrepreneurial activity after graduation, but postpone this to a more distant future. Bhandari (2006) conducted research study on group of university students in India intended to start their own business or work for someone else. According to results of factor analysis, six variables: to lead other people, to be my own boss, to put my innovative ideas into practice, determination, personal challenge and non-business education were found to relate to the dependent variable.

Maalu, Nzuve, and Magutu (2010) found that the goals in entrepreneurial ability are influenced by factors such as: maximum utilization of own skills and talents; full control of own future; achievement of what one values personally; being "my own boss"; the freedom/opportunity to make own decisions; the opportunity to learn new things; financial security; performing challenging and exciting work; having peace of mind with a peaceful and stress-free life; allocation of enough free time for family, hobbies, leisure, and other interests; an opportunity to extend one's range of abilities, a goal to accumulate wealth; desire to live an adventurous and exciting life; the goal

to start own business, striving for an idea to own business, an ultimate goal to be self-employed and the wish to become an influential person to the future.

Risk-taking & venturing is one of the major characters of entrepreneurs. It is willingness to bear substantial loss with a motive to achieve higher profit subsequently (Forlani & Mullins, 2000). It has been reported that it is precisely this willingness to take risks, which separates the entrepreneur from non-entrepreneurs (Elston & Audretsch, 2007). Achchuthan and Nimalathasan (2012) studied Entrepreneurial intention among management undergraduates of Sri Lanka. They reported that Self-employment Desirability and Risk-Tolerance influence intention of students toward the entrepreneurship.

RESEARCH METHOD

The present study analyzed risk-taking ability factor of entrepreneurship intention with reference to students of selected universities of North India. In this regard, objectives of the research study are as below:

- 1. To identify the main driving factors for Entrepreneurship Intention of students.
- 2. To study effect of specific demographic variables viz. gender, university type and area type on risk-taking ability factor of entrepreneurship intention of students.

For the present study, data were collected through self-designed structured close-ended questionnaire based on 5-point Likert Scale through convenient sampling. After validating, the final total sample size was 400. Factor Analysis, ANOVA and *t-test* were applied for data analysis using SPSS 21. Cronbach alpha was found to be 0.82, indicating higher reliability of the Questionnaire. The respondents were management and engineering students from government and private universities belonging to Metropolitan area & Non-Metropolitan area, consisting of male and female students.

FINDINGS AND DISCUSSION

First of all through the factor analysis, four driving factors of Entrepreneurship Intention were derived, which are: Factor 1: Autonomy Factor (When an individual is inclined towards entrepreneurship for the sake of freedom of work); Factor 2: Need for Achievement Factor (When an individual needs some resources to achieve purpose of entrepreneurship); Factor 3: Confidence in Support-system Factor (When an individual have confidence in government and other support-system and then works hard to achieve effectiveness); and Factor 4: Risk-Taking Ability Factor (When an individual knows risks related to entrepreneurship and ready to take risk).

The present study emphasized on risk-taking ability factor of entrepreneurship intention and the results are presented in form of two problems and 16 hypotheses as follows:

Problem 1: Is risk-taking ability factor of entrepreneurial intention a function of university type, area and gender?

 H_{01} : Gender (Male students and female students) does not interact in terms of risk-taking ability factor of entrepreneurial intention.

The null hypothesis is accepted (F= 1.897, p= .169)

 H_{02} : University type (Private university students and government university students) does not interact in terms of risk-taking ability factor of entrepreneurial intention.

The null hypothesis is accepted (F= .872, p= .351)

 H_{03} : Area (Metropolitan area students and non-metropolitan area students) does not interact in terms of risk-taking ability factor of entrepreneurial intention.

The null hypothesis is accepted (F=.479, p= .489)

 H_{04} : Gender and university type do not interact in terms of risk-taking ability factor of entrepreneurial intention. The null hypothesis is accepted (F= .895, p= .345)

 H_{05} : Gender and area do not interact in terms of risk-taking ability factor of entrepreneurial intention. The null hypothesis is accepted (F= 2.840, p= .093)

 H_{06} : University type and area do not interact in terms of risk-taking ability factor of entrepreneurial intention. The null hypothesis is accepted (F= .012, p= .913)

 H_{07} : Gender, university type and area do not interact in terms of risk-taking ability factor of entrepreneurial intention.

The null hypothesis is accepted (F=1.786, p= .182)

Table 1
Tests of between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	104.648 ^a	7	14.950	1.219	.291
Intercept	174101.996	1	174101.996	14193.309	.000
GENDER	23.267	1	23.267	1.897	.169
UNIV_TYPE	10.698	1	10.698	.872	.351
AREA	5.871	1	5.871	.479	.489
GENDER * UNIV_TYPE	10.975	1	10.975	.895	.345
GENDER * AREA	34.842	1	34.842	2.840	.093
UNIV_TYPE * AREA	.146	1	.146	.012	.913
GENDER * UNIV_TYPE * AREA	21.913	1	21.913	1.786	.182
Error	4808.462	392	12.266		
Total	192662.000	400			
Corrected Total	4913.110	399			

Dependent Variable: RISK TAKING

Problem 2: Do the students differ in terms of risk-taking ability factor of entrepreneurial intention?

 H_{08} : Male students do not differ significantly from female students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{MALE}} = 21.84 \frac{\overline{X}_{\text{MALE}} \approx \overline{X}_{\text{FEMALE}}}{\overline{X}_{\text{FEMALE}} = 21.49}$$

The null hypothesis is accepted (t = .997, p = .319)

 H_{09} : Private university students do not differ significantly from government university students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{PRIV,UNIV.}} = 21.53 \frac{\overline{X}_{\text{PRIV,UNIV.}} \approx \overline{X}_{\text{GOVT,UNIV.}}}{\overline{X}_{\text{GOVT,UNIV.}}} = 21.80$$

The null hypothesis is accepted (t = -.769, p = .442)

 H_{10} : Metropolitan area students do not differ significantly from non-metropolitan area students in terms of risk-taking ability factor of entrepreneurial intention.

or of entrepreneurial intention.
$$\overline{X}_{\text{METROPOLITAN}} = 21.63 \frac{\overline{X}_{\text{NON-METROPOLITAN}} \approx \overline{X}_{\text{METROPOLITAN}}}{\overline{X}_{\text{NON-METROPOLITAN}} = 21.71$$

The null hypothesis is accepted (t = -.228, p = .820)

 H_{II} : Metropolitan male students do not differ significantly from non-metropolitan male students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{METROMALE}} = 22.16 \frac{\overline{X}_{\text{METROMALE}} \approx \overline{X}_{\text{NON-METROMALE}}}{\overline{X}_{\text{NON-METROMALE}} = 21.52}$$

The null hypothesis is accepted (t = 1.215, p = .226)

 H_{12} : Metropolitan female students do not differ significantly from non-metropolitan female students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{METRO,FEMALE}} = 21.09 \frac{\overline{X}_{\text{NON-METRO,FEMALE}} \overline{X}_{\text{METRO,FEMALE}}}{\overline{X}_{\text{NON-METRO,FEMALE}}} = 21.89$$

The null hypothesis is accepted (t = -1.737, p = .084)

a. R Squared = .021 (Adjusted R Squared = .004)

 H_{13} : Private university male students do not differ significantly from government university male students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{PRIV.UNIV.MALE}} = 20.92 \frac{\overline{X}_{\text{GOVT.UNIV.MALE}} > \overline{X}_{\text{PRIV.UNIV.MALE}}}{\overline{X}_{\text{GOVT.UNIV.MALE}} = 22.28}$$

The null hypothesis is rejected (t = -2.515, p = .013)

Hence, private university male students differ significantly from government university male students in terms of risk-taking ability factor of entrepreneurial intention. government university male students are found to be more inclined towards risk-taking ability factor than private university male students. It shows that government university male students are having more entrepreneurial intention in terms of risk-taking ability.

 H_{14} : Private university female students do not differ significantly from government university female students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{PRIV.UNIV.FEMALE}} = 21.55 \frac{\overline{X}_{\text{PRIV.UNIV.FEMALE}} \overline{X}_{\text{GOVT.UNIV.FEMALE}}}{\overline{X}_{\text{GOVT.UNIV.FEMALE}} = 21.64}$$

The null hypothesis is accepted (t = .159, p = .874)

 H_{15} : Private university male students do not differ significantly from private university female students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{X}_{\text{PRIV.UNIV.MALE}} = 21.49 \frac{\overline{X}_{\text{PRIV.UNIV.MALE}} \overline{X}_{\text{PRIV.UNIV.FEMALE}}}{\overline{X}_{\text{PRIV.UNIV.FEMALE}}} = 21.55$$

The null hypothesis is accepted (t = -.101, p=.920)

 H_{16} : Government university male students do not differ significantly from government university female students in terms of risk-taking ability factor of entrepreneurial intention.

$$\overline{\overline{X}}_{\text{GOVT.UNIV.MALE}} = 22.28 \frac{\overline{\overline{X}}_{\text{GOVT.UNIV.MALE}} \approx \overline{\overline{X}}_{\text{GOVT.UNIV.FEMALE}}}{\overline{\overline{X}}_{\text{GOVT.UNIV.FEMALE}}} = 21.42$$

The null hypothesis is accepted (t = -1.837, p = .068)

CONCLUSIONS AND RECOMMENDATIONS

The research analyzed risk-taking ability factor on entrepreneurship intention of students of selected universities of North-India. Results of the study showed that private university male students differ significantly from government university male students in terms of risk-taking ability factor of entrepreneurial intention. Government university male students were found to have more risk-taking ability than private university male students, indicating that government university male students are having more entrepreneurial intention in terms of risk-taking ability. Hence, it can be concluded that in general government university male students are having more entrepreneurial intention with reference to risk-taking ability.

During the study, it was observed that in comparison to government universities, students' placement cell is functioning better in private universities. It is also the fact that in Indian society, male members have more responsibility for earning. Probably due to these reasons, government university male students are showing more risk-taking ability in terms of entrepreneurial intention.

It implied that government universities/institutions and government bodies should take care of establishment and effective functioning of Entrepreneurship Development Cell (EDC) to help and guide especially government university male students, as well as female students too.

REFERENCES

- Achchuthan, S., & Nimalathasan, B. (2012). Level of entrepreneurial intention of the management undergraduates in the University of Jaffna, Sri Lanka: Scholars and undergraduates perspective. *South Asian Academic Research Journals*, 2(10), 24–42.
- Bhandari, N. C. (2006). Intention for entrepreneurship among students in India. *The Journal of Entrepreneurship*, 15(2), 169–179.
- Douglas, E. J., & Shepherd, D. A. (2000). Entrepreneurship as a utility-maximizing response. *Journal of Business Venturing*, 15(3), 231–251.
- Elston, J. A., & Audretsch, D. B. (2007). The role of risk in entrepreneurial behavior. In M. Minniti *et al.* (Eds.), *Entrepreneurship: The Engine of Growth, Volumes 1–3* (pp. 65–80). London, UK: Praeger.
- Forlani, D., & Mullins, J. W. (2000). Perceived risks and choices in entrepreneurs new venture decisions. *Journal of Business Venturing*, 15, 305–322.
- Henry, B. (2003). *Entrepreneurship education in Kenya: A reality or plodding on?* Presented in The First International Entrepreneurship Conference, 23–24 April, 2003 Kenya.
- Kuratko, D. F., & Hodgetts, R. M. (2004). *Entrepreneurship: Theory, process and practice*. Ohio, US: Thomson South-Western.
- Maalu, J. K., Nzuve, S. M., & Magutu, P. O. (2010). A survey of personal goals and perceptions of entrepreneurial ability among students at the school business, University of Nairobi. *African Journal of Business & Management*, 1, 29–43.
- Scarborough, N. M., & Zimmerer, T. W. (2003). *Effective small business management: An entrepreneurial approach*. Seventh Edition. Upper Saddle River, NJ: Prentice Hall.
- Venesaar, U., & Loomets, P. (2006). The role of entrepreneurship in economic development and implications for sme policy in Estonia 1, Tallinn University of Technology, School of Economics and Business Administration, Estonia. Paper presented to the 14th Nordic Conference on Small Business Research, May 11–13, 2006, Stockholm, Sweden.

BUSINESS FAILURE OF FAMILY BUSINESS: A CASE IN MINING INDUSTRY INDONESIA ITS IMPLICATIONS FOR FUTURE BUSINESS **SUCCESS**

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ABSTRACT

The purpose of this paper is to analyze after of business failure by addressing; how the developed new ventures and what was the effect of the previous failure on the decision the owner to embark on subsequent ventures. The authors resort to qualitative methods to understand the effect of business failure from the owner's perspective. Authors undertook a semi-structured interview to the owner mining industry. The data are collected via interviews, observations, and literature reviews. The participants of the study include the director and a second-generation successor from a mining industry in Indonesia. The selection of objects is based on a purposive sampling method with related selection based on accessibility between researchers and the research participants. The result of this study shows that the effect of previous failures decides the owner goes into another business, namely business investment. Experience teaches that the readiness of employees to run a business is important, if it is not ready, then the owner's involvement is needed. Succession that does not go well results in business failure.

Keywords: Business failure, family business, learning from failure, succession.

INTRODUCTION

Every business has a life span that is depicted by its business life cycle. A business life cycle is normally defined by four stages; Introduction, Growth, Maturity and Decline. Most business life cycles will experience a slow introducetion and growth stage, a short maturity stage and a rather quick decline stage (Titus, 2005).

There are five principle factors which are the main factors of business success, namely corporate structure, financial structure, productivity, technological procedures and human resources. The authors found that previous failure impacted individuals strongly, being shaped by the individual's experience and age, and their perception of the blame for the failure (Ibrahim, Soufani, & Lam, 2001).

A firm's ownership structure and its features are considered very important antecedents of firm growth (Shleifer & Vishny, 1997; Thomsen & Pedersen, 2000). Firm's ownership seems especially interesting within the context of Family Firm as their ownership structures are generally driven by the family principals' priorities.

Growth is also important for family firms as it represents the outcome of strategies develop to more successfully seize opportunities in the market (Le Breton-Miller & Miller, 2008), give new employment opportunities to succeeding generations (Habbershon, Williams, & MacMillan, 2003). Therefore, growth is not only a measure of business success but also of the well-being of the family over time (Olson et al., 2003). Combination of family ownership structure and family ownership dynamics affects firm growth (Calabrò, Campopiano, & Basco, 2017).

The majority of studies in business failure have focused on business rather than the owner of the business, while the entrepreneurs and the related factors are the most important factors in entrepreneurial process. The cases which have mostly attracted the attention of researchers are causes of business failure, patterns for failure prediction, and strategy for weak businesses, while the events occurred for company and its owner and manager were reviewed less than once (Stokes & Blackburn, 2002). Unsuccessful entrepreneurs who experience failure in businesses, "strategy and investment" is an important factor, while successful entrepreneurs do not emphasize on this it.

Some researchers did not consider succession or succession planning as a control. Since a succession event can be a pivotal moment that causes a change in the ownership structure (Sciascia, Mazzola, & Chirico, 2013), it might be relevant for future research to consider whether family owners are involved in the succession process to further understand the effects of the dynamics and conflicts among them on growth.

The focus of the current study is to gain more insight into long-lived family businesses by studying a case study of a family business in Indonesia. This study aims to analyze after of business failure by addressing: how the developed new ventures and what was the effect of the previous failure on the decision the owner to embark on subsequent ventures.

LITERATURE REVIEW

In general, many different terminologies are related to business failure, such as firm closure, entrepreneurial exit, dissolution, discontinuance, insolvency, organizational mortality, and bankruptcy (Cardozo & Borchert 2004). Typically, entrepreneurial failure is defined as the cease of an operation for financial reasons (Liao, Welsch, & Moutray, 2008).

Nonetheless, a failed business is the one which have to sell or liquidate in order to avoid losses or pay off the creditors, or the one which is unable to make a profitable go of the business (Gaskill, Van Auken, & Manning, 1993). Pretorius (2009) reviewed the business failure definitions, and suggested a universal definition for the failure phenomenon: "a venture fails when it involuntarily becomes unable to attract new debt; consequently, it cannot continue to operate under the current ownership and management" (Pretorius, 2009).

Managerial experience and financial management team are vital in determining the success or failure of a firm; a survey studying the causes of firm bankruptcy in Canada found that almost half of the firms in Canada go bankrupt due to internal problems caused by managerial inexperience and lack of knowledge and vision (Baldwin, Bian, Dupuy, & Gellatly, 2000). Management's motivation, qualities, and skills have an impact on the way a company is managed. The majority of previous studies on business failure have confirmed the effect of "lack of management skills" as the most important factor (Berryman, 1983; Gaskill *et al.*, 1993; Baldwin *et al.*, 2000; Tushabomwe-Kazooba, 2006; Ooghe & De Prijcker, 2008).

Although there is no universal definition of what succession is, the definition proposed by Beckhard and Burke (1983 in Handler, 1994) seems quite appropriate, namely: "the passing of the leadership baton from the founder-owner to a successor who will either be a family member or a non-family member; that is, a 'professional manager'. However, succession is not just a step of passing the baton, but instead it is a process that develops over several stages that evolve over time and, in some cases, begin even before the successor enters the business (Handler, 1994). It should be noted that succession should not be viewed as an event that occurs with the sudden death of the founder. In fact, a succession results from effective planning soon after descendants enter the business (Ibrahim *et al.*, 2001). The successors' perspective family business, the succession process has drawn the attention of researchers who have tried to identify those variables driving an effective succession.

For instance, Dyer (1986) believes that the role of business, family and administration (and their cultural setting) are critical elements to the succession. The succession process encompasses a number of factors which are usually associated with both the predecessor and successor. Among these factors, quality, harmony of family relations, organizational culture and succession planning have been emphasized in relevant literature. After a qualitative study with 32 family businesses, Handler (1989) found that mutual respect and a common vision between the founder and successor are very important components of an effective succession. Several authors also stress the importance of personal and professional realization of family members (Dunn, 1995; Basly, 2007).

RESEARCH METHOD

To explore this issue, this study conducted a case study research, which aims to describe the state of the problem. According to Yin (2004), in Yin (2017), case study is an appropriate strategy to be implemented in a study when the research wants to answer the "How" or "Why" of a problem and the research problem is directed to a series of contemporary processes or events (the focus of the research lies on a contemporary phenomena). The research participants are a director and a second generation successor from a family business that works in the mining industry in Indonesia.

The type of data used in this study is qualitative data. According to Kuncoro (2010), qualitative data is a set of data that cannot be measured with a numerical scale. The data was obtained from primary and secondary sources. According to Lofland (1984) in Moleong (2014), the primary data includes the words and actions from the real-life condition, while the rest acts as supporting data, such as documents and others. This research uses a purposive sampling method (purposely), where the data is only provided by the members of the chosen population in accordance with certain considerations (Sugiyono, 2014).

According to Miles and Huberman in Sugiyono (2014), analyzing a qualitative data needs to be done in an interactive manners and lasted continuously; in result, the data is saturated. The data that will be analyzed includes:

- 1. Reduction of data, which summarize, choose the main points, focuse on the important thing, and sought the theme and pattern;
- 2. Presentation of data, in the form of brief descriptions, charts, relationships between categories, flowcharts, and the like; and,
- 3. Conclusion or verification of conclusions based on the results.

FINDINGS AND DISCUSSION

The analysis was conducted based on the result of interview evaluation with the resource person, which then compared the result of the interview from the resource person. Then, the interview between the participants will be further compared with the observation result and the literature study.

The guideline research questions of the empirical work are How did the company close? How did you manage to support them? Why did the company close? What main lessons did you take from the failure? How was the opinion of yourself affected by the experience? and Did your attitude towards risk change after the experience? The result of the research questions as follows Table 1.

Table 1
Interview with the Main Subject, Discussing about Ways to Analyze After of Business Failure by Addressing: How the Developed New Ventures and What Was the Effect of the Previous Failure on the Decision the Owner to Embark on Subsequent Ventures.

Subsequent Ventures. Interviewee Interview with the main subject Analysis

- 1. "... The point is that if I was a professional at first, then indeed the professional time was made by the company. Well, the settings, my brother who wants to help my father, then only 5 years to help, my brother died.."
- 2. "...Well, that's a special logistics, just, after 25 years, the mining industry in 2012 is like this, now we are introspection, in 2010 it was a good time we never looked at other businesses, because we did see a better focus right, even though at that time I also began to understand the concept of Warren Buffet, but maybe because of time, or maybe because of busyness, so we were stunned by the logistics business this. Well when the mine began to fall, it began to decline, we got the trial, our account receivable was enormous. So finally we go down. Not debt, but accounts receivable. "
- 3. "... So here it is, there is an expression in English that says "If parents build their own business, even though until they will die, they will not give the business to the legacy."
- 4. "... Yes, it was in the middle of the way, so I felt that there were 2 captain on one ship, that is, and my men had read about it. Now I am also a Padang person."
- 5. "... The "Padang" person, let alone his child, is still small, his son is already large, and is still a child. Now it's also a lesson for all of us as parents, we must realize that our age is our children are teenagers, our children are adults, and our children also have space where they can argue."
- 6. "... In 2013 my father died. Finally, I must be patient. Well, when we want to take off, unfortunately external condition is not as good as before."
- 7. "... the director that I appointed, I have trusted him very much, and I have educated him. But at the end, when the company had a problem, it turned out that in my heart that if I saw him save a wound against me that had never been delivered, finally what he was going to escort me to change industry, instead he was the first to leave... Well, we jumped a little, what was even worse, after three months until four months, I got the news he joined with my other subordinates to make other similar companies."
- 8. "...Finally I switched business by making my assets into a portfolio investment... portfolio investment does not require a lot of energy. Enough on a laptop, just one administration person, and 1 supervisor, already. So I am now only three people. And I say this, my liquid is even better than when I was active in the real sector."

- Good legacy is the most important for successful succession.
- The owner of the business decision maker that facilitates the process of changing make another business to achieve success.
- Business failure can be caused by the owner of a business family.
- The combination of family ownership structure and family ownership dynamics affects firm growth.
- The effect of the previous failure on the decision the owner to embark on subsequent ventures then success.

Source: Interview transcript data with resource persons were processed.

Five propositions in this research as follows:

- *P_I*: Good legacy is the most important for successful succession. This finding is in line with a research by Habbershon *et al.* (2003); Olson *et al.* (2003).
- P_2 : The owner of the business decision maker that facilitates the process of changing make another business to achieve success. This is consistent with the findings of Stokes and Blackburn (2002).
- *P*₃: Business failure can be caused by the owner of a business family. This is in accordance with Stokes and Blackburn (2002).
- *P*₄: The combination of family ownership structure and family ownership dynamics affects firm growth. This finding is in line with a research by Calabrò *et al.* (2017).
- P_5 : The effect of the previous failure on the decision the owner to embark on subsequent ventures then success.

Family business is something unique. Failure in the business family often occurs because the previous generation is not ready to give a relay to the next generation. The failure of a business is often caused by bad legacy. But the next generation can make the failure of the business a valuable lesson in the decision to switch business to achieve success. The most important finding in this study that distinguishes previous research is the effect of the previous failure on the owner's decision to embark on subsequent ventures and success.

CONCLUSION

The most important findings of the research are:

The first Good legacy is the most important for successful succession. The second proposition shows that the owner of the business decision maker that facilitates the process of changing make another business to achieve success. The third proposition shows that Business failure can be caused by the owner of a business family. The fourth proposition shows that the combination of family ownership structure and family ownership dynamics affects firm growth. The last proposition shows that the effect of the previous failure on the decision the owner to embark on subsequent ventures then success.

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REFERENCES

Baldwin, J., Bian, L., Dupuy, R., & Gellatly, G. (2000). *Failure rates for new Canadian firms: New perspectives on entry and exit.* Ottawa, Ontario: Tunney's Pasture.

Basly, S. (2007). Conservatism: An explanation of the financial choices of the small and medium family enterprises. *Corporate Ownership and Control*, *5*(1), 459–469.

Berryman, J. (1983). Small business failure and survey of the literature. *International Small Business Journal: Researching Entrepreneurship, 1*(4), 47–59.

Cardozo, R., & Borchert, P. S. (2004). *The disappearance of business*. Retrieved from: http://www.babson.edu/entrep/fer/BABSON2003/II/IIP2/Chapter1.htm.

Calabrò, A., Campopiano, G., & Basco, R. (2017). Principal-principal conflicts and family firm growth: The moderating role of business family identity. *Journal of Family Business Management*, 7(3), 291–308.

Dunn, B. (1995). Success themes in Scotish family businesses: Philosophies and practices through the generations. *Family Business Review*, 8(1), 17–28.

Dyer, W. G. (1986). *Cultural change in family firms: Anticipating and managing business and family transitions*. San Francisco, CA: Jossey-Bass.

Gaskill, L. R., Van Auken, H. E., & Manning, R. A. (1993). A factor analytic study of the perceived causes of small business failure. *Journal of Small Business Management*, 31(4), 18–31.

- Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of Business Venturing*, *18*(4), 451–465.
- Handler, W. C. (1989). Methodological issues and considerations in studying family businesses. *Family Business Review*, 2(3), 257–276.
- ----- (1994). Succession in family business: A review of the research. Family Business Review, 7(2), 133–157.
- Ibrahim, A. B., Soufani, K., & Lam, J. (2001). A study of succession in a family firm. *Family Business Review*, 14(3), 245–258.
- Kuncoro, M. (2010). *Metode riset untuk bisnis dan ekonomi: Bagaimana meneliti dan menulis tesis?* Edisi 3. Jakarta: Erlangga.
- Le Breton-Miller, I., & Miller, D. (2008). To grow or to harvest? Governance, strategy and performance in family and lone founder firms. *Journal of Strategy and Management*, 1(1), 41–56.
- Liao, J., Welsch, H., & Moutray, C. (2008). Start-up resources and entrepreneurial discontinuance: The case of nascent entrepreneurs. *Journal of Small Business Strategy*, 19(2), 1–16.
- Moleong, L. J. (2014). Metodologi penelitian kualitatif. Bandung: Remaja Rosdakarya.
- Olson, P. D., Zuiker, V. S., Danes, S. M., Stafford, K., Heck, R. K. Z., & Duncan, K. A. (2003). The impact of the family and the business on family business sustainability. *Journal of Business Venturing*, *18*(5), 639–666.
- Ooghe, H., & De Prijcker, S. (2008). Failure processes and causes of company bankruptcy: A typology. *Management Decision*, 46(2), 223–242.
- Pretorius, M. (2009). Defining business decline, failure and turnaround: A content analysis. *The Southern African Journal of Entrepreneurship and Small Business Management*, 2(1) 1–16.
- Sciascia, S., Mazzola, P., & Chirico, F. (2013). Generational involvement in the top management team of family firms: Exploring nonlinear effects on entrepreneurial orientation. *Entrepreneurship Theory and Practice*, *37*(1), 69–85.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The Journal of Finance, 52(2), 737–783.
- Stokes, D., & Blackburn, R. (2002). Learning the hard way: The lessons of owner-managers who have closed their businesses. *Journal of Small Business and Enterprise Development*, 9(1), 17–27.
- Sugiyono. (2014). Metodologi penelitian bisnis. Bandung: AlfaBeta.
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, *21*(6), 689–705.
- Titus, S. (2005). *Key reasons why small business fail*. Commmissioned by IIB-Business Supports Americas. Accredited Associate of The Institute for Independent Business.
- Tushabomwe-Kazooba, C. (2006). Causes of small business failure in Uganda: A case study from Bushenyi and Mbarara Towns. *African Studies Quarterly*, 8(4), 27–25.
- Yin, R. K. (2017). *Case study research and applications: Design and methods*. 6th Edition. USA: Sage publications, Inc.

A NEW MODEL OF CUSTOMER HELPING BEHAVIOR

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ABSTRACT

Despite customer helping behavior being understood as an important antecedent of competitive advantage in business, prior studies have not fully addressed this phenomenon. Understanding what factors generate such behavior could help businesses design better marketing strategies and tactics to strengthen their business-customer relationships. This study, therefore aims to fulfill this important gap by proposing a new model of customer helping behavior. Our model proposes that diffusion of responsibility, evaluation apprehension and pluralistic ignorance affect customer intention to help. In addition, we propose that customer intention to help is also responsible for consumer helping behavior. Finally, our model shows that brand loyalty can moderate the relationship between diffusion of responsibility, evaluation apprehension and pluralistic ignorance, and customer helping intention, as well as the association between customer helping intention and customer helping behavior.

Keywords: Brand loyalty, helping behavior, responsibility, business strategy.

INTRODUCTION

"Great things in business are never done by one person.

They are done by a team of people"

Steve Jobs – Apple CEO

Modern businesses understand that to survive in today's unforgiving business competitiveness, businesses should constantly maintain, if not improve, their business performance. Extant literature shows that strong business performance not only guarantees businesses sustainability, but more importantly growth and financial stability (Wiklund & Shepherd, 2005). Maintaining business performance is not an easy task, because there are many variables responsible for high businesses performance (Garg, Joubert & Pellissier, 2004). Among these variables, Steven, Dong and Dresner (2012) suggest that customer variable is the key variable affecting high business performance. According to Herjanto and Franklin (in press), customer variable is unique, because every customer is different and therefore, business organizations should adopt different levels of customer service and exercise different strategies to handle customer complaints. The ability to effectively solve customer complaints improves overall customer satisfaction (Davis-Sramek, Droge, Mentzer & Myers, 2009), higher customer commitment (Hocutt, Chakraborty & Mowen, 1997), stronger customer loyalty (Jones & Farquhar, 2007), and more importantly customer faithfulness.

Faithful customers not only have a stronger emotional attachment with the business organization, they are also more sensitive and accepting of their preferred businesses (Herjanto, Schller-Sampson & Andreani, 2019). As a result, faithful customers are more helpful and willing to help businesses solve their problems (Hasan, Raheem & Subhani, 2011), which includes providing positive responses to other customer complaints. For example, professional football team quarterback, Colin Kaepernick, is a former San Francisco, California "49ers" team player decided to kneel down during the National Anthem just ahead of a televised football game as a strong protest against police brutality and bias against black crime suspects. The protest generated mixed public outcries and shook his sponsor, NIKE. Many customers expressed their disagreement with Mr. Kaepernick's action on social media and suggested boycotting NIKE's products. Following this incident, faithful customers helped NIKE by guarding and confronting negative comments. As a result, NIKE's stock went up and sales increased by 31% (Meyersohn, 2018). This shows that customer helping behavior plays an important role in saving businesses (Kim & Yi, 2017) and promotes effective functioning of businesses (Groth, 2001). Thus, as stated by Steve Job's quote above, the success of businesses is dependent on people which include staff and customers. Despite these intensive efforts, extant literature on customer helping behavior focused on determinants of customer helping behavior (Revilla-Camacho, Vega-Vazquez & Cossio-Silva, 2015) and therefore studies on consequences of such behavior is limited. The current study proposes a new model of customer helping behavior in an effort to build upon existing research.

LITERATURE REVIEW

Customers want and appreciate goods and services produced ethically and responsibly (Caruana, & Chatzidakis, 2014) that support fairness, sustainability, justice, and other social issues (Anderson, 2018). Such products reflect a company's genuine values and ethical concern (Carrigan & Attala, 2001) for customer welfare (Ferrell, Harrison, Ferrell & Hair, 2018). In response, customers tend to express their positive feelings toward such companies and

products through their positive reactions (Cheruiyot, Maru & Muganda, 2012) and behaviors, such as customer helping behavior.

Customer Helping Behavior

Customer Helping Behavior (CHB) refers to customer behaviors specifically intended to help a company without benefiting the customer (Johnson & Rapp, 2010). Traditionally, Hassan, Mydock, Pervan and Kortt (2016) argue that CHB is also known as customer citizenship behavior. Customers who possess higher levels of CHB are more likely to show expanded behavior such as actively responding to company research invitations, increasing order quantities, confidently displaying the brand, providing feedback, promoting positive WOM and more importantly, customer forgiveness in the event of a company's service or product failures (Dolatabadi & Noghabi, 2012). Based on these benefits, Kim, and Yi (2017) concluded that CHB is not only important for company sustainability but more importantly, it improves the company – customer interrelation.

Responsibility

The degree of a customer to exercise CHB is determined by the degree of his or her willingness to become involved and actively engaged in the situation. The action to help is determined by cognitive, affective and social influences (Bandura, 2002) that translate to feelings of responsibility. Early research by Latané and Darley (1970) examined feelings of responsibility associated with the bystander effect, which posits that the more bystanders there are, the less inclined they are to express helping behavior. Three of the psychological processes related to the reluctance to intervene (Latané & Nida, 1968; Latané & Darley, 1970) are diffusion of responsibility, apprehension evaluation, and pluralistic ignorance.

Diffusion of Responsibility

Some people feel a reduced sense of responsibility due to a subconscious subdivision of responsibility within the larger group. In other words, they perceive everyone in the group as responsible, but nobody in the group feels individually responsible (Bandura, 2002; Latane and Darley, 1968). This concept, known as diffusion of responsibility (Latané & Darley, 1970; Latane & Nida, 1981) establishes that while others are present in a group, individuals are less likely to act due to the perceived shared responsibility, and the assumption that someone else will help. Diffusion of responsibility recognizes that a customer believes others are available and likely to help. Negative consequences are increased aggression in groups, and most notably, a decrease in the customer's intention to help.

Apprehension Evaluation

Another cognitive process affecting responsibility is the psychological risk of apprehension evaluation (Latane and Darley, 1968). Apprehension evaluation refers to the fear of embarrassment and ridicule while aware that others are watching. Their fear of inadequacy and fear of being judged (Latané & Darley, 1970) while others are watching makes them reluctant to intervene. A customer's feelings of apprehension consequently result in their inhibited behavioral intention to help.

Pluralistic Ignorance

The phenomenon known as pluralistic ignorance (Katz & Allport, 1931) is another concept that strongly influences intention to help. Pluralistic ignorance is described as a member or members of a group secretly rejecting group norms, but follow the perceived group norms (Miyajima & Yamaguchi, 2017) to maintain their standing within the group. In other words, a person who goes along with social norms despite his or her own values (McCarty & Karau, 2017) assuming that everyone else already shares an opinion. Pluralistic ignorance creates doubt (Rendsvig, 2014) that any victimization has actually occurred. A customer's pluralistic ignorance creates a conformed perception that responsibility belongs to nobody, which impedes his or her intention to take helping action.

In varying degrees, these three concepts can influence a customer's intention to help. Therefore, we propose the following:

- P_{I} . The lower diffusion of responsibility improves customer intention to help.
- P_2 . The lower evaluation apprehension improves customer intention to help.
- P_3 . The lower pluralistic ignorance improves customer intention to help.

Intention to Help

Intention to help refers to a willingness and desire of customers to involve and engage in support and helping a company voluntarily (Afsar & Bin Saeed, 2010). According to Organ (1988), the degree of a customer's intention to help is determined by a customers' level of their altruism. Further, Fishbein and Ajzen (2011) assert that a customer's intention to actually perform an act of help is the immediate determinant of such helping behavior. Based on this consideration, therefore, a customer's intention to help will strongly and positively affect their actual helping behavior. Thus, we propose:

 P_4 . The higher the customer intention to help, the stronger the helping behavior.

Brand loyalty

A brand loyalty refers to the customer positive attitude toward a brand that reflects to their strong attachment (Liu, Li, Mizerski & Soh, 2012) and willingness to maintain their relationship with the brand (Fajer & Schouten, 1995). To Lynch (1995), the degree of brand loyalty is determined by customer positive brand perception which is generated by enjoyment, fulfilment and positive feelings that customer experience during their interaction with the brand. As a result, a higher brand loyalty creates feelings such as belongingness, group camaraderie (Hur, Ahn & Kim, 2011), and commitment which affect the value of ongoing customer relationships, repeat purchasing (Bowen & McCain, 2015; Jambulingam, Kathuria, & Nevin, 2011), and more importantly reduce the intention to boycott the products (Petrof, 1963). In his study, Petrof (1963) noted that brand loyalty reduces consumer disappointment and allows customers to solve their problems with the brand positively. In other words, Punniyamoorthy and Raj (2017) suggest that brand loyalty allows customers to involve actively in their decision making to solve their problem with the problem. Hence, brand loyalty reduces customers' uncertainty in dealing with any brand problem situations and consequently, it will affect the association of three component of responsibilities on intention to help. This argument suggests that brand loyalty moderates the association between intention to help and helping behavior. Based on these arguments, it is safe to propose the following:

- P_5 . The degree of brand loyalty moderates the relationship between (a) diffusion responsibility, (b) apprehension evaluation, (c) pluralistic ignorance and customer intention to help
- P_6 . The degree of brand loyalty moderates the link between customer intention to help and the helping behavior.

CONCLUSION

As a business strategy, establishing and maintaining a good rapport with customers is essential. Our study proposes the basis for a new marketing strategy that leverages the strength of that bond. Encouraging customer helping behavior with the underpinnings of shared moral, ethical, and social beliefs translates to the mutual benefits of long-term customer commitment. This study suggests that forces behind customer helping behavior are important elements of the customer-business relationship. As a conceptual study, we have introduced several propositions for empirical research in this important area. With a desire to build upon research, we are interested in understanding how customer responsibility to protect a brand (Williams & Steffel, 2015) reinforces the customer-business relationship. Moreover, we are interested in studying the potential effects of giving faithful customers a voice to mobilize the power of responsibility and brand loyalty.

REFERENCES

- Afsar, B., & Bin Saeed, B. (2010). Subordinate's trust in the supervisor and its impact on organizational effectiveness. *The Romanian Economic Journal*, 13(38), 3–25.
- Anderson, M. (2018). Fair trade and consumer social responsibility: Exploring consumer citizenship as a driver of social and environmental change. *Management Decision*, 56(3), 634–651.
- Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, 31(2), 101–119.
- Bowen, J. T., & McCain, S. L. C. (2015). Transitioning loyalty programs: A commentary on "the relationship between customer loyalty and customer satisfaction". *International Journal of Contemporary Hospitality Management*, 27(3), 415–430.
- Carrigan, M., & Attalla, A. (2001). The myth of the ethical consumer Do ethics matter in purchase behavior? *Journal of Consumer Marketing*, 18(7), 560–577.
- Caruana, R., & Chatzidakis, A. (2014). Consumer social responsibility (CnSR): Toward a multi-level, multi-agent conceptualization of the "other CSR". *Journal of Business Ethics*, 121(4), 577–592.

- Cheruiyot, T. K., Maru, L. C., & Muganda, C. M. (2012). Reconstructing dimensionality of customer corporate social responsibility and customer response outcomes by hotels in Kenya. *Journal of Business, Economics & Finance*, 1(3), 5–21.
- Davis-Sramek, B., Droge, C., Mentzer, J. T., & Myers, M. B. (2009). Creating commitment and loyalty behavior among retailers: What are the roles of service quality and satisfaction? *Journal of the Academy of Marketing Science*, 37(4), 440–454.
- Dolatabadi, H. R., & Noghabi, E. S. M. (2012). Prioritization of customer helping behavior in improvement the performance of Business Company in Iran with using AHP analytic. International *Journal of Academic Research in Business and Social Science*, *2*(7), 333–347.
- Fajer, M. T., & Schouten, J. W. (1995). Breakdown and dissolution of person-brand relationships. In F. R. Kardes, & M. Sujan (Eds.), *Advances in Consumer Research*, 22, 663–667.
- Ferrell, O. C., Harrison, D. E., Ferrell, L., & Hair, J. F. (2018), Business ethics, corporate social responsibility, and brand attitudes: An exploration study. *Journal of Business Research*, 95, 491–501.
- Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach.* New York, NY: Taylor & Francis.
- Garg, A. K., Joubert, R. J. O., & Pellisier, R. (2004). Measuring business performance: A case study. *Southern African Business Review*, 8(1), 7–21.
- Groth, M. (2001). *Managing service delivery on the internet: Facilitating customers' coproduction and citizenship behavior in service organizations.* Doctoral dissertation. University of Arizona.
- Hassan, M., Mydock III, S., Pervan, S. J., & Kortt, M. (2016). Facebook, self-disclosure and brand mediated intimacy: Identifying value creating behaviors. *Journal of Consumer Behavior*, *15*(6), 493–502.
- Hasan, S. A., Raheem, S., & Subhani, M. I. (2011). Measuring customer delight: A model for banking industry. *European Journal of Social Sciences*, 22(4), 510–518.
- Herjanto, H., & Franklin, D. (2019). Investigating salesperson performance factors: A systematic review of the literature on the characteristics of effective salesperson. *Australasian Marketing Journal*, (in press).
- Herjanto, H., Scheller-Sampson, J., & Andreani, F. (2019). *Customer faithfulness: The moderating role of the relational benefits trilogy*. Presented at Marketing Management Association Conference, Chicago, IL, March 27–29.
- Hocutt, M. A., Chakraborty, G., & Mowen, J. C. (1997). The impact of perceived justice on customer satisfaction and intention to complain in a service recovery. In M. Brucks, & D. J. MacInnis (Eds.), *Advances in Consumer Research*, 24, 457–463.
- Hur, W. M., Ahn, K. H., & Kim, M. (2011). Building brand loyalty through managing brand community commitment. *Management Decision*, 49(7), 1194–1213.
- Jambulingam, T., Kathuria, R., & Nevin, J. R. (2011). Fairness-trust-loyalty relationship under varying conditions of supplier-buyer interdependence. *Journal of Marketing Theory and Practice*, 19(1), 39–56.
- Johnson, J. W., & Rapp, A. (2010). A more comprehensive understanding and measure of customer helping behavior. *Journal of Business Research*, 63(8), 787–792.
- Jones, H., & Farquhar, J. D. (2007). Putting it right: Service failure and customer loyalty in UK banks. *International Journal of Bank Marketing*, 25(3), 161–172.
- Katz, D., & Allport, F. H. (1931). Student attitudes: A report of the Syracuse University research study. Syracuse, NY: Craftsman Press.
- Kim, S. Y., & Yi, Y. (2017). Embarrassed customers: The dark side of receiving help from others. *Journal of Service Management*, 28(4), 788–806.
- Latané, B., & Darley, J. M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, 10(3), 215–221.
- ----- (1970). The unresponsive bystander: Why doesn't he help? New York, NY: Appleton-Century-Croft.
- Latané, B., & Nida, S. (1981). Ten years of research on group size and helping. *Psychological Bulletin*, 89(2), 308–324.
- Liu, F., Li, J., Mizerski, D., & Soh, H. (2012). Self-congruity, brand attitude, and brand loyalty: A study on luxury brands. *European Journal of Marketing*, 46(7/8), 922–937.
- Lynch, J. J. (1995). Customer loyalty and success. UK: Palgrave Macmillan.
- McCarty, M. K., & Karau, S. J. (2017). Social inhibition. In S. G. Harkins, K. D. Williams, & J. M. Burger (Eds.), Oxford library of psychology. *The Oxford handbook of social influence* (pp. 165–181). New York, NY: Oxford University Press.

- Meyersohn, N. (2018). Young people support Nike's bet on Kaepernick, poll shows. *CNN Wire Service*. Retrieved December 18, 2018, from https://money.cnn.com/2018/09/13/news/companies/nike-colin-kaepernick-just-do-it-national-anthem-nfl-football/index.html.
- Miyajima, T., & Yamaguchi, H. (2017). I want to but I won't: Pluralistic ignorance inhibits intentions to take paternity leave in japan. *Frontiers in Psychology*, 8(1508), 1–12.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Petrof, J. (1963). The effect of the student boycott upon the purchasing habits of Negro families in Atlanta, Georgia. *Phylon*, 24(3), 266–270.
- Punniyamoorthy, M., & Raj, M. P. M, (2017). An empirical model for brand loyalty measurement. *Journal of Targeting, Measurement and Analyzing for Marketing*, 15(4), 222–233.
- Rendsvig, R. K. (2014). Pluralistic ignorance in the bystander effect: Informational dynamics of unresponsive witnesses in situations calling for intervention. *Synthese*, 191(11), 2471–2498.
- Revilla-Camacho, M. A., Vega-Vazquez, M., & Cossio-Silva, F. J. (2015). Customer participation and citizenship behavior effects on turnover intention. *Journal of Business Research*, 68(7), 1607–1611.
- Steven, A. B., Dong, Y., & Dresner, M. (2012). Linkages between customer service, customer satisfaction and performance in the airline industry. Investigation of non-linearities and moderating effects. *Transportation Research Part E*, 48, 743–754.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configuration approach. *Journal of Business Venturing* 20, 71–91.
- Williams, E. F., & Steffel, M. (2015). Does sharing signal caring? Asymmetric interpretations of the informativeness of own and others' social media communications. In K. Diehl, & C. Yoon (Eds.), *Advances in Consumer Research*, 43, 197–202.

THE INFLUENCE OF KNOWLEDGE, ATTITUDE AND FINANCIAL BEHAVIOR ON PERSONAL FINANCIAL MANAGEMENT AMONG THE GOVERNMENT EMPLOYEES AT TWO HEALTH CENTERS

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ABSTRACT

This study aims to examine (1) the influence of financial knowledge, financial attitude, and financial behavior partially to personal financial management among the government employees at Kalibawang and Sentolo 2 Health Centers, Kulon Progo; (2) the differences in personal financial management between female and male government employees at Kalibawang and Sentolo 2 Health Centers. The population used in this research was all active State Civil Apparatus in Kalibawang and Sentolo 2 Health Centers with the sample of 90 people. The data analysis techniques used were Multiple Linear Regression Analysis and independent sample *t-test*. The study found that: (1) financial attitude and financial behavior had a positive and significant effect partially on personal financial management of government employees at Kalibawang and Sentolo 2 Health Centers; (2) there is no difference in personal financial management between female and male government employees at Kalibawang and Sentolo 2 Health Centers.

Keywords: Financial knowledge, financial attitude, financial behavior, personal financial management.

INTRODUCTION

Everyone certainly wants to have a prosperous life. One of the indicators of a prosperous person is not experiencing financial difficulties because the person is assumed to have the skills to deal with his or her financial problems or is able to manage his or her personal finance well (Margaretha and Sari, 2015). Therefore, if someone has a good personal financial management, the welfare of the person is expected to increase. This is in accordance with the opinion stated by Kapoor, Dlabay, and Hughes (2012) that personal financial management is a process of managing money to achieve personal welfare

According to Atkinson and Messy (2012) from OECD (Organization for Economic Cooperation and Development), financial literacy is a combination of financial knowledge, financial attitudes, and financial behavior. The existence of financial literacy can help someone to improve one's knowledge in dealing with financial problems, so it is expected that if someone makes the right planning in financial management, then the welfare of that person can increase. In other words, if a person has a good financial literacy (a combination of financial knowledge, financial attitudes and financial behavior), the welfare of that person can increase.

Financial knowledge includes understanding the basic concepts of finance covering the calculation of simple interest rates, compound interest, inflation effect, opportunity cost, time value of money, liquidity of an asset and many more (Wagland & Taylor, 2009 in Yushita, 2017). Financial knowledge and skills in managing personal finance are very needed in everyday life, so that someone will not make any mistakes in financial management, and help in arranging personal financial plans, so that the time value of money can be maximized and profits can be increased which ultimately will be able to improve his or her living standards (Yushita, 2017).

Financial attitude is the application of financial principles to create and maintain values through making decisions and managing resources as best as possible. According to Ariani (2015), in making financial decisions, a person can be influenced by rational attitudes (a person's thinking attitude which is based on a sense that can be proven by existing data and facts) and irrational attitudes (a person's thinking attitude that is not based on a sense). A person who has a good financial attitude will be wise in managing his or her personal finances, so that they have a financial surplus for future savings and can improve their welfare (Hilgert, 2003 in Ariani, 2015)

Financial behavior is the human behavior in relation to money management (Xiao, 2009; Nofsinger, in Manurung, 2012). According to Ricciard and Simon (2000) (in Siahaan, 2013), financial behavior is the involvement of existing behavior in a person which includes emotions, traits, preferences, and various kinds of things that are attached in a person as an intellectual and a social being that interact and underlie the emergence of decisions to take an action. Financial behavior is related to one's financial responsibility in relation to the ways of managing the finance (Ida and

Dwinta, in Andrew and Linawati, 2014). Someone who has good financial behavior will consider the risks and profits encountered in managing their personal finances so that they can improve their standard of living.

The results of the research generally show that there is still a low level of financial literacy in developed countries and more so in developing countries including Indonesia (Aziza, 2017). The Financial Services Authority (OJK) noted that in 2016, the Indonesian financial literacy index was still low, in which the public financial inclusion index was just around 67.8% and around 29.7% for the financial literacy (OJK, 2013; Yudistira, 2017). The survey results show that the Indonesian people still have low financial literacy, indicating that their financial knowledge, financial attitudes and financial behavior were still not good.

The problems that arise due to the low financial literacy of the Indonesian people are the emergence of various problems regarding personal financial management, such as having no willingness to save money, having lots of debt, tendency not to pay the bills on time, high frequency of shopping for unnecessary items, and being easily deceived by bids cheap and easy fraudulent or credit investment. Therefore, OJK's efforts to provide education about financial literacy, which includes financial knowledge, financial attitudes, and financial behavior are very much needed, on various occasions by collaborating with various parties in order to improve the financial literacy of the Indonesian people. Increased financial knowledge can help someone to use money with a more appropriate and wiser attitude, so that it can provide economic benefits and can behave well by carrying out an analysis of risks and profits that ultimately improve their welfare.

Based on the description of the level of financial literacy, which is a representation of a combination of financial knowledge, financial attitudes and low financial behavior and the relationship between the three with personal financial management, researchers are motivated to carry out an in-depth testing of the influence of the three on personal financial management of the employees of State Civil Apparatus (ASN) at Kalibawang and Sentolo 2 Kulonprogo Health Centers. The problems in this study are:

- 1. Do financial knowledge, attitudes, and behaviors partially affect the personal financial management of the employees of the State Civil Apparatus at Kalibawang and Sentolo 2 Kulonprogo Health Centers?
- 2. Are there differences in personal financial management between female State Civil Apparatus employees and the male State Civil Apparatus employees at Kalibawang and Sentolo 2 Kulonprogo Health Center?

LITERATURE REVIEW AND HYPOTHESIS

Financial Literacy

Financial literacy is the financial knowledge and the ability to apply it (Lusardi and Mitchell, 2010 in Silvy, and Yulianti, (2013). According to Vit *et al.* (2000) (in Wiharno, 2015) financial literacy includes the ability to distinguish financing options, discuss financial issues without any worry, plan for the future and respond competently to life events that affect daily financial decisions covering events in the economy in general. Financial literacy will influence how people save, borrow, invest, and manage finances (Hailwood, 2007 in Siahaan, 2013).

Financial literacy is a basic need that has to be owned by someone to avoid financial difficulties, so that they get the welfare of their lives (Silvy and Yulianti, 2013). With appropriate personal financial management that is supported by good financial literacy, it is expected that one's welfare will be improved. This is because no matter how big a person's income is, if it is not supported by good personal financial management, then the person will experience financial problems.

Financial Knowledge

Knowledge refers to what individuals know about personal financial problems that are measured by their level of knowledge about various concepts of personal finance (Marsh, 2006 in Herdjiono and Damanik, 2016). Whereas Bowen (2003) (in Wiharno, 2015) defines financial knowledge as an understanding of financial terms and concepts that are needed to be used everyday in social life. Someone who has good financial knowledge will have good financial behavior as well, for example paying all bills on time and having an emergency fund that can be used at any time.

Financial knowledge is closely related with financial literacy (Herdjiono and Damanik, 2016). Chen and Volpe (1998) (in Herdjiono and Damanik, 2016), define financial literacy as knowledge to manage finances in financial decision making. The financial knowledge includes (Chen and Volpe, 1998 in Yushita, 2017): (1) General knowledge of personal finance; (2) Savings and loans; (3) Insurance; (4) Investment.

Financial Attitude

Financial attitude is a state of mind, opinion and judgment on finance (Pankow, 2003 in Herdjiono and Damanik, 2016). Whereas Anthony (2011) defines financial attitudes as the application of financial principles to create and maintain values through making decisions and managing resources as best as possible. Attitude is a personality image of a person that is born through physical movements and mind responses towards a situation or object (Emil, 1996 in Silvy and Yulianti, 2013). A good financial management attitude starts with conducting financial planning (short-term and long-term goals), so that they will not be trapped in unlimited financial behavior and ultimately can improve their lives' welfare. Financial attitudes can be reflected in the following six concepts, namely (Furnham, 1994 in Herdjiono and Damanik, 2016): (1) Obsession, which refers to a person's mindset about money and their perception of the future to manage money well; (2) Power, which refers to someone who uses debt as a tool to control other people and according to them, money can solve problems; (3) Effort, which refers to someone who feels worthy of having money from what he or she has done; (4) Inadequacy, which refers to someone who has a tendency not to spend money; (6) Security, which refers to someone's view of money such as the assumption that money is better to only be saved by themselves without saving it in a bank or for investment.

Financial Behavior

Financial behavior is a person's ability to regulate which includes planning, budgeting, checking, managing, controlling, searching and storing daily financial funds (Kholilah and Iramani, 2013 in Herdjiono and Damanik, 2016). The emergence of financial behavior is the impact of the magnitude of one's desire to fulfil their lives needs in accordance with the level of income that they earn (Kholilah and Iramani, 2013 in Herdjiono and Damanik, 2016). Furthermore, financial behavior according to Xiao (2009) (in Wiharno, 2015) is defined as human behavior in relation to money management. One's financial behavior can be seen from four things, namely (Dew and Xiao, 2011 in Herdjiono and Damanik, 2016): (1) Consumption, namely the households expenditure on various goods and services, which can be seen from what someone buys and the reason of buying; (2) Cash flow management, which is an indicator of a person's ability such as paying the bills on time, paying attention to notes or proof of payment and making financial budgets and future planning; (3) Savings and investments are made to anticipate future events and obtain future benefits; (4) Debt management, namely the ability of a person to take advantage of debt so that it does not make someone experiences bankruptcy, but increases his welfare instead.

Personal Financial Management

Personal financial management (MKP) is the art and science of managing financial resources from individual units (Giltman, 2002 in Yushita, 2017). Kapoor *et al.* (2012) (in Wiharno, 2015) defines personal financial management as a process of managing money to achieve economic satisfaction or personal welfare. Knowing the right personal financial management is the first step to manage the personal money. According to Warsono (2010) (in Yushita, 2017), managing personal finance can be seen from four domains, namely: (1) Use of funds, related to how to allocate these funds to meet their needs appropriately, and must be based on priorities; (2) Deciding the funds sources, regarding the ability to know and find alternative sources of funds as sources of financial income to be managed, in addition to funding sources from; (3) Risk management, in relation to having good protection to anticipate unexpected events, such as illness, urgent needs, etc.; (4) Future planning which is important to do so that someone can analyze the future needs so that they can prepare investments from now on.

Development of Hypothesis

Financial Knowledge with Personal Financial Management

Financial knowledge is not only important for individual interests and is not only about the ability to use money wisely, but it can also provide economic benefits (Siahaan, 2013). Financial knowledge and skills in managing personal finance are very much needed in daily life, so that people will be prevented from experiencing financial difficulties. The existence of good financial knowledge will help a person in managing personal financial planning, so that person can maximize the time value of money and the benefits earned will be bigger and will improve their standard of living (Yushita, 2017; Wiharno, 2018). Based on the description above, the first hypothesis can be formulated, namely:

Hypothesis 1: Financial knowledge has a positive effect on personal financial management

Financial attitude with Personal Financial Management

Financial attitude is a state of mind, opinion and judgment about finance (Pankow, 2003 in Herdjiono and Damanik, 2016). The attitude of good financial management starts by applying good financial attitudes as well, so that it will have a financial surplus for future savings (Silvy and Yulianti, 2013). In conducting the personal financial management, there has to be a financial planning, both short and long term planning. Therefore, having wise attitudes means having the ability to manage personal finances well too, and can improve the welfare of their lives (Wiharno, 2018). Based on the description above, the second hypothesis can be formulated, namely:

Hypothesis 2: Financial attitudes has a positive effect on personal financial management

Financial Behavior with Personal Financial Management

Financial behavior according to Xiao (2009) (in Wiharno, 2015) is human behavior in relation to money management. Financial knowledge has a good influence on everyday decision making regarding finance. Increased financial knowledge can help someone to use money with a more appropriate and wiser attitude, so that it can provide economic benefits and be able to behave well by conducting an analysis of risks and benefits which can ultimately improve their welfare (Silvy and Yulianti, 2013; Wiharno, 2018) . Based on the description above, the third hypothesis can be formulated, namely:

Hypothesis 3: Financial behavior has a positive effect on personal financial management

Gender Factors with Personal Financial Management

Research conducted by Mandell (2008), Cole *et al.* (2008), Worthington (2004), Chen and Vope (1998), Lusardi and Mitchell (2006, 2008) (in Wiharno, 2015) show that the male has higher financial literacy rates than women. According to Atkinson and Messy (2012) of the OECD (in Wiharno, 2015), women had lower levels of finansial knowledge, financial behavior and personal financial management compared to men. Nevertheless, women had higher financial attitudes than men. This is also found in the research conducted by Bank Indonesia and the Demographic Institute of the University of Indonesia which shows that women have a higher level of financial literacy and personal financial management than men. Based on the description above, the following hypothesis can be formulated:

Hypothesis 4: There are differences in personal financial management between male and female State Civil Apparatus employees at Kalibawang and Sentolo 2 Kulonprogo Health Centers

The theoretical framework in this study can be described on Figure 1.

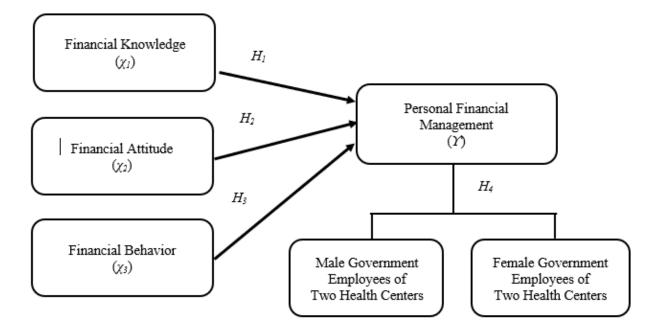


Figure 1. Theoretical framework

RESEARCH METHOD

The population in this study were all ASN employees at the Kalibawang and Sentolo 2 Kulonprogo Health Centers who were still actively working. The study sample was 90 respondents who were the same as the total population. The sampling method is a saturated sampling method. The data in this study were collected by distributing questionnaires. The data of this study were quantitative data which were measured on a Likert scale. The data used are primary data, namely data sourced from respondents which were obtained directly by using the questionnaire method. According to Jogiyanto (2015), questionnaire is a communication instrument in the form of questions or statements to obtain answers from the respondents.

In order to obtain good research results, it was very important to test the research instruments used because research instruments must be able to measure accurately. Tests are conducted using validity and reliability tests (Jogiyanto, 2015). Furthermore, the classic assumption test was performed on the existing data, including: normality test, multicollinearity test, and heteroscedasticity test (Santoso, 2015). After the classic assumption test was declared to fulfill the requirements, the next step was to carry out the Multiple Linear Regression Analysis which was intended to test the effect of independent variables (financial knowledge, financial attitudes, and financial behavior) on the dependent variable (personal financial management). The next test was to use the independent sample t-test, which was intended to test whether there are differences in personal financial management between male and female State Civil Apparatus employees at Kalibawang and Sentolo 2 Kulonprogo Health Centers.

FINDINGS

Respondents' Characteristics

The respondents who participated in this study were those who were active as ASN employees in both Kalibawang (KB) and Sentolo 2 (S2) Kulon Progo Health Centers. The following Table 1 shows the profile of all respondents who participated in this study.

Table 1 Respondents' Profile

Based on	Categories	Total	Percentage
Gender	Female	62	69%
	Male	28	31%
Age	20 to less than 30	17	19%
	30 to less than 40	19	21%
	40 to less than 50	29	32%
	50 or more	25	28%
Education	High School	33	37%
level	Diploma/ D3	39	43%
	Bachelor	16	18%
	Master	1	1%
	Others	1	1%
Income	< Rp 1,000,000.00	11	12%
monthly	Rp 1,000,000.00 – Rp 2,999,999.00	34	38%
•	Rp 3,000,000.00 – Rp 4,999,999.00	39	43%
	> Rp 5,000,000.00	6	7%

Table 1 shows that based on gender, the characteristics of ASN employees at Kalibawang and Sentolo 2 Health Centers who were the respondents in this study were mostly female as many as 62 people (69%), the highest age group of respondents is around 40 - <50 years old, which is amounted to 29 people (32%), the highest level of education of most respondents was Diploma / D3 which was chosen by 39 people (43%), and there was one group which amounted to 39 people (43%) had the highest monthly income in the range of Rp. 3,000,000.00 - Rp. 4,999,999.00.

Multiple Linear Regression Analysis

Table 2 shows the test results by using the Multiple Linear Regression analysis. The *t-test* results in Table 2 shows that the probability value (sig) of the financial knowledge (FK) variable > α (0.962 > 0.05), it can be concluded that H_0 is accepted and H_A is rejected. Thus, hypothesis 1 is not supported. This can be interpreted that the financial

knowledge variable does not have a significant positive effect on personal financial management (PFM), that is, if financial knowledge is continuously improved, then the personal financial management will not necessarily be better, the possibility can be worse or does not change (fixed).

The test results for financial attitude (FA) variables show that the probability value (sig) of financial knowledge variable $< \alpha (0.005 < 0.05)$, so it can be concluded that H_0 is rejected and H_A is accepted. Thus, hypothesis 2 is proven to be true. It can be interpreted that the financial attitude variable has a significant positive effect on personal financial management, namely if the financial attitude is getting better then the personal financial management will be better as well.

Table 2. Multiple Linear Regression Analysis Results

	Model	Unstandardized Coefficients		Standardized Coefficients		C! -
		$\boldsymbol{\mathit{B}}$	Std. Error	Beta	ı	Sig.
	(Constant)	7.225	4.122		1.753	.083
	Total FK	013	.277	004	048	.962
1	Total FA	.349	120	.264	2.911	.005
	Total FB	.514	.095	.482	5.414	.000

a. Dependent Variable: Total PFM

The next test results, which is the financial behavior variables have a probability value (sig) $\leq \alpha$ (0.000 \leq 0.05) so it can be concluded that H_0 is rejected and H_A is accepted. Thus, hypothesis 3 is supported. This indicates that financial behavior (FB) has a significant positive effect on personal financial management, meaning that if financial behavior is getting better, then the personal financial management will be better as well.

The following Table 3 and Table 4 show the independent sample *t-test* results.

Table 3
Independent Sample *T-test* Results

			PFM_Gender_Combination	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of	F		.000	
Variances	Sig.		.997	
	t		390	394
	df		88	53.508
	Sig. (2-tailed)		.698	.695
t-test for Equality of Means	Mean Difference		356	356
	Std. Error Difference		.913	.904
	95% Confidence Interval of the	Lower	-2.171	-2.168
	Difference	Upper	1.459	1.456

Table 4
Statistical Description of the Male and Female PFM Variable Scores

	Group_KB & S2_Gender	N	Mean	Std. Deviation	Std. Error Mean
PFM_KB & Sentolo 2	Female	62	38.32	4.044	.514
	Male	28	38.68	3.935	.744

Based on Table 3, it is shown that in Levene's test there is a *p-value* (0.997) > α (0.05) so that it can be interpreted that the two variants are the same. Thus, the next stage is to do a different test (sig 2-tailed) by using the equal variances assumed assumption. The stage of conducting this different test is done to prove whether the 4th hypothesis is supported or not. Based on the results in Table 3, it is known that p-value (0.698) > α (0.05), it can be concluded that H_0 is accepted and H_A is rejected. Thus, hypothesis 4 is not supported. This means that there is no significant difference in personal financial management between male and female ASN employees in the two health

centers. This can also be seen in Table 4 which shows the PFM mean of female employee at 38.32 and the PFM mean of 38.68 for the male employees, which means the mean of the two groups of employees is not significantly different.

DISCUSSION

The first finding in this study was that financial knowledge (FK) had a negative but not significant effect on the personal financial management (PFM). This can be interpreted that the higher one's financial knowledge is, the worse the personal financial management of the person, but the effect is not significant. The findings of this study are not in accordance with the research results by Yushita (2017) and Wiharno (2018) stating that financial knowledge has a positive and significant effect on personal financial management. This finding shows that the average score of financial knowledge of most respondents (57%) ranged from 37.5%–68.8% (including the low category) while the average score of respondents' perceptions of their personal financial management was high (3.8). This indicates that respondents have a low understanding of financial knowledge that includes general financial knowledge, banking products, insurance and investment but that does not necessarily mean that their personal financial management is bad. In fact, their financial management is classified as good. This is indicated by the majority of respondents agreeing on a number of statements in the questionnaires on the personal financial management such as making financial decisions by thinking first, they state that they buy something because they need to, and not to impress others, and they believe that thinking about the expected future financial conditions in five or 10 more years is an important thing in achieving financial goals.

The second finding in this study is that financial attitudes (FA) have a positive and significant effect on personal financial management (PFM), which means that the better the financial attitude a person has, the better the person will be in managing his or her personal finances. This is in line with the research results by Yushita (2017) and Wiharno (2018) that financial attitudes have a positive and significant effect on personal financial management. The findings of this research are supported by the obtained average score of respondents 'perceptions towards financial attitudes which is included as the high category (3.4) and the average score of the respondents' perceptions towards the personal finansial management is also included to a high category (3.8). This indicates that if the respondents' financial attitudes are good, then the respondents' personal financial management is also good. This is indicated by the majority of respondents agreeing on some items in the questionnaire statements regarding financial attitudes such as financial planning is important for future life, getting remuneration is a right that is deserved after work, and buying goods only as needed.

The third finding in this study is that financial behavior (FB) has a positive and significant effect on personal financial management (PFM), which means that the better financial behavior a person has, the better that person is in managing his personal finances. This result is in line with the research results by Yushita (2017) and Wiharno (2018) that financial behavior has a positive and significant effect on personal financial management. The findings show that the average score of respondents 'perceptions of financial behavior (3.75) and the average score of respondents' perceptions of personal financial management (3.8) are equally high. This indicates that respondents have good financial behavior, so the personal financial management of the respondents is also good. This is proven by the majority of respondents agreeing on a number of statement in the questionnaires on financial behavior such as financial records help in managing the money, financial records help in planning needs, I save money for unexpected needs, I always save a portion of my income that I earn.

The last finding in this study is that there are no differences in personal financial management between male and female State Civil Service employees in the two Health Centers. This can be interpreted that the male personal financial management is not better than the female, and conversely the personal financial management of female is not better than the male. The absence of significant differences in personal financial management is due to the level of education of most male and female respondents who are relatively not much different, namely high school / vocational school (37%) and Diploma / D3 (43%) and this relatively similar respondents' education levels are indicated to be the reason behind the same perception towards the personal financial management, among others, having the same ability to find solutions before financial problems increase, having a mindset that investment for future goals is important; having specific plans for achieving financial goals; and saving is done first before buying or paying other expenses. The results of this study are not in line with the results from Mandell (2008), Cole *et al.* (2008), Worthington (2004), Chen and Vope (1998), Lusardi and Mitchell (2006, 2008) (in Wiharno, 2015) which showed that male financial literacy rates were higher than women.

CONCLUSION

The conclusion of this study is that financial attitudes and financial behavior partially have a significant effect on personal financial management. If the financial attitude is getting better, then the personal financial management will be better too, and if financial behavior is getting better, then the personal financial management will be better as well. Nevertheless, financial knowledge has no significant effect on personal financial management.

There are some suggestions for the employees of ASN Kalibawang and Sentolo 2 Health Centers. The of analysis results show that financial attitudes and financial behaviors have a positive and significant effect towards personal financial management. Therefore, the researchers suggest that the good financial attitudes and financial behaviors of the employees are maintained or made better so that the personal financial management will still be good or be better as well. For example, by continuing the habit of making financial records of income and expenses on a regular basis, trying to buy goods in accordance with needs rather than desires, conducting price surveys before buying goods that are needed, paying the bills in a timely manner, and still behaving economically in using money. If these things are conducted as a routine, then financial problems will be resolved properly and wisely so as to create prosperity in accordance with the expectations.

Future researchers with similar topics are suggested to add other variables besides the variables used in this study, which are likely to affect personal financial management more accurately. In addition, future researcher should use intervening variables (mediation variables or moderation variables) to obtain more accurate results, that may provide appropriate answers to the hypotheses in this study that are not proven, namely financial knowledge does not have a significant effect on personal financial management .

REFERENCES

- Andrew, V., & Linawati, N. (2014). Hubungan faktor demografi dan pengetahuan keuangan dengan perilaku keuangan karyawan swasta di Surabaya. *Finesta*, 2 (2), 35–39.
- Anthony, R. A/P R. (2011). Knowledge, attitude, practice and satisfaction on personal financial management among the medical practitioners in the public and private medical services in Malaysia. Thesis. Faculty of Medicine Universiti Kebangsaan Malaysia Kuala Lumpur.
- Ariani, S. (2015). Pengaruh literasi keuangan, locus of control, dan etnis terhadap pengambilan keputusan investasi. Surabaya: Sekolah Tinggi Ilmu Ekonomi Perbanas.
- Atkinson, A., & Messy, F. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study*. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15, OECD Publishing (http://dx.doi.org/10.1787/5k9csfs90fr4-en).
- Aziza, K. S. (2017). OJK: Hanya 29,7 persen masyarakat yang paham keuangan. *Kompas.com*. Retrieved from http://ekonomi.kompas.com/read/2017/10/04/144105526/ojk-hanya-297-persen masyarakat-yang-paham-literasi-keuangan.
- Bowen, C. F. (2003). Financial knowledge of teens and their parents. *Journal of Financial Counseling and Planning*, 13(2), 93–102.
- Herdjiono, I., & Damanik, L. A. (2016). Pengaruh financial attitude, financial knowledge, parental income terhadap financial management behavior. *Jurnal Manajemen Teori dan Terapan*, 9(3), 226–241.
- Jogiyanto, H. (2015). Pedoman survei kuesioner. Yogyakarta: BPFE.
- Kapoor, J. R., Dlabay, L. R., & Hughes, R. J. (2012). Personal finance. Tenth Edition. New York: McGraw-Hill.
- Manurung, A. H. (2012). Teori investasi: Konsep dan empiris. Jakarta: PT. Adler Manurung Press.
- Margaretha, Farah and Sari, Siti May. (2015). Faktor Penentu Tingkat Literasi Keuangan Para Pengguna Kartu Kredit di Indonesia. *Jurnal Akuntansi dan Investasi*, 16 (02), 132–144.
- Otoritas Jasa Keuangan. (2013). OJK Perkuat Upaya Inklusi dan Perluasan Akses Keuangan Melalui Literasi Keuangan. (http://keuangan.kontan.co.id/news/ojk-literasi-keuangan-masyarakat-masih-rendah)
- Santoso, S. (2015). Menguasai statistik multivariat. Jakarta: PT Elex Media Komputindo.
- Siahaan, M. D. R. (2013). *Pengaruh literasi keuangan terhadap perilaku pengelolaan keuangan pada mahasiswa perguruan tinggi di Surabaya*. Artikel Ilmiah. Surabaya: Sekolah Tinggi Ilmu Ekonomi Perbanas.
- Silvy, M., & Yulianti, N. (2013). Sikap pengelola keuangan dan perilaku perencanaan investasi keluarga di Surabaya. *Journal of Business and Banking*, *3*(1), 57–68.
- Wiharno, H. (2018). Pengaruh Financial Knowledge, Financial Behavior, dan Financial Attitude terhadap Personal Financial Management (Survei pada aparatur sipil negara daerah di Kabupaten Kuningan). *JRKA*, 4 (01), 64–76.

- Wiharno, H. (2015). Karakteristik sosial ekonomi yang mempengaruhi literasi keuangan serta dampaknya terhadap manajemen keuangan personal (Survei pada aparatur sipil negara daerah di Kabupaten Kuningan). *JRKA*, 1(02), 1–15.
- ----- (2018). Pengaruh financial knowledge, financial behavior, dan financial attitude terhadap personal financial management (Survei pada masyarakat di Kabupaten Kuningan). *JRKA*, *4*(1), 64–76.
- Yudistira, G. (2017). OJK: Literasi keuangan masyarakat masih rendah. *Kontan.co.id*. Retrieved from http://keuangan.kontan.co.id/news/ojk-literasi-keuangan-masyarakat-masih-rendah.
- Yushita, A. N. (2017). Pentingnya literasi keuangan bagi pengelolaan keuangan pribadi. *Jurnal Nominal*, VI (01).

THE COCOON AND SHALLOT FOR BEAUTY: INNOVATION OF THAI WISDOM IN COMMUNITY PRODUCT DEVELOPMENT THE SUFFICIENCY ECONOMY PHILOSOPHY

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ABSTRACT

The Development Beauty Set of Thai Wisdom from Cocoon and Shallot. It is research and development. Focus on research. Experiment to create new inventions with the community. purpose to create an innovation by combining wisdom, develop a beauty soap from cocoon mixed with shallots under the learning base with Baan Noon Kraseat. Kantharawichai District Mahasarakham province and the process of technology transfer to the community. The study group consisted of 35 people. It focuses on the prototype community used tools. It is a participant observation. Structured interview and the workshop to transfer knowledge. There is a study to create a common soap formula. The research found that the development of soap formula together with the Baan Noon Kraseat group had three formulas. Formula 1, Cocoon and Shallot soap. Formula 2, Thai dessert soap and Formula 3, cocoon and Shallot soap for children. The benefits of community innovation will affect the reduction of the problem of shallot prices and the development is based on the principle of sufficiency. Made to Self before order to sell. Reduce household income. And increase the revenue to the community. By utilizing local resources for maximum benefit.

Keywords: *Innovation*, *wisdom*, *product community*, *cocoon*, *shallot*.

INTRODUCTION

Development of herbal products for beauty from local resources It is a research study under sufficiency economy philosophy so the community can reduce expenditure. Monetize your household and community as strong can be grouped into community enterprises. Most of the community migrate have a base of belief. The local wisdom is a cognitive, inherited since the ancestors. The herb process is therefore not new, but the community has continually been developed and promoted. The introduction of local herbs that are cheap at all levels can be picked up to add value, but it is manufactured under the base of sufficiency (Ratanakom, 2011) is manufactured to the rest of its own, so it can be used by others. Good quality products are environmentally friendly, because Thais often believe that the products that are processed from the herb are in a form used as a remedy. Food, beverage, cosmetics and household are more secure than products manufactured by chemical ingredients. This is because the herb is causing toxic or adverse reactions that are less than the current synthetic chemicals (Karunamaiwong, 2003).

For Thai wisdom, herbal and health of the traditional the living way of Thai people from the past to the present. There are many different branches, but the popularity and development of the most widely known consumers are "health and beauty products." The market for health and beauty of the world is growing steadily and from the flow of health care that spreads to people of all ages. This makes the product of natural products more popular than those produced by synthetic goods, which is a great opportunity for Thai entrepreneurs to produce the products. Meet the needs of consumers appropriately (Public Relations Department, 2018.

The cosmetic and cosmetic industry Data Warehouse has predicted the value of the world's natural cosmetic market in 2017 years to be valued up to 47 million or baht 1,529 million. The average growth rate during the year of 2013-2 017 is 8% Thai beauty business in Thailand, a Thai-Asian Cosmetics Center, Japan and South Korea. Total value 2.1 million baht the domestic market is 60% is 1.2 million and the international market 40% is a value of 9 billion baht. This is because Thailand has the world's top biological diversity and is the country where one of the world's largest natural resource bases (Srinakrarintaraviroj University, 2018).

Thai silk extract is one of the most popular products from wisdom, which is known for its present beauty, which is used as an important raw material in the spa and beauty salon areas. The popularity to the Thai silk powder is used to remove the skin, as it is a vital part that can be maintained by the skin. Mulberry Department of the Queen Sirikit was researching the utilization of debris since the year 2005 by bringing the residual chips from the silk to the weaving. Research to bring out the rest of the silk route to the use (Khaosod, 2016).



Figure 1. Coocoon name nang noi srisakeat 1



Figure 2. Shallot name bang chang srisakeat

In addition to Srisakeat Province, there are varieties of beauty benefits, and there is also an important raw material that every household must have. It is a good place to develop a Thai beauty. The Shallot in addition to ancient Thai people are believed to help relieve the cold for children or the low immune. The firm helps to maintain the skin, but the problem is not rarely interested in bringing Shallot to develop as a general skin care product, or become widespread in the community, because it has been understood to have a pungent scent. The researchers invented a new formula in the smell to reduce the pungent of the Shallot, using Mook and Thai orchids. An interesting research example, which is used and actually distributed. The researchers have the idea to reveal the Heritage of the Beauty Set which is another Thai wisdom to the public. After the researchers have made research for integrated development in conjunction with Many University, the formula, which is a master product in the group. Baan noon kraseat district Kantarawichai, MahaSarakham Province.

LITERATURE REVIEW

The researcher studied about the research and development of herbal soap processing products. The group has a new shape for the processed herb group.

- 1. The shape of the design concept is geometry and natural shapes. To attract attention from consumers including can be used as a deposit in another way and
- 2. In the form of processed herbal packaging the group has a new format in two forms: single cube and processed herbal soap set (Ratanakom, 2011).

And there are researchers who have studied about the processing of products from Acanthus leaf for health, beauty the study indicated that Local wisdom in the use of Acanthus leaf to develop that product Bang Tib community is a model community in education. Because the community believes that the conventional wisdom of the Acanthus leaf can be boiled and treated with flares Useful for both eating and bathing the community therefore continue to the development as a beauty product. Both in the form of soap, shampoo and conditioner (Wankaew, 2016). The

community in Thailand has started to focus on research on herbal soap. Because of the miracle study of herbal soap, it was found that soap is a type of cosmetics used to cleanse the body. Originally used for body cleaning only at present, the production of soap contains more ingredients, so that the soap has properties that have medicinal properties the needs of consumers. Such as having beautiful colors to use and fragrant which is different from using synthetic products that entrepreneurs try to make the product worth using the packaging is beautiful. But hidden with dangerous chemicals with toxic residues (Tepyaa, 2006).

At present, the use of cocoons containing sericin is a waste material from the production of silk fibers. Because the cocoon consists of fibroin fibers and sericin glue. Silk glue water be used to produce soap as well Basil has properties to help firm skin. From the study of properties, it was found that the silk glue helps reduce inflammation. Antimicrobial and release moisture well It also has special properties to store water well. good storage, affected by x-rays (UV) helps to inhibit the absorption of radiation that is harmful to the body. According to natural proteins from silk glue like used as an ingredient in cosmetics (Tanthanee, 2018).

RESEARCH METHOD

This research is a mix method:

1. Experimental research

The development of a chemical precursor from chemistry A is acetate substance. The boiled water is extracted from the cocoon and chemical B. Extracted from the red onion and trial plan There are three plans: To create new product formal. Cocoon and Shallot Soap Create a new product formula. Thai Dessert Cocoon Soap and Create a new product Formula cocoon and Shallot liquid soap.

- 2. Qualitative research
 - 2.1 Population in research: Group of women Education in MahaSarakham. Sample groups Select a specific number of 35 people divided into three groups: Community leader group six people, group operators 20 persons and group of experts and developing teachers from School outside Education Center five people, Academics from MahaSarakham University three people, Academic from and MahaSarakham Rajabhat University, one people total of nine people.
 - 2.2 Collect this research data: Researchers use several ways to capture information to provide comprehensive and complete information. With a qualitative study method (qualitative Research) by performing data collection. The study will collect information be classified by the information you want to study and from related resources. The information collected is the collection of information you need to study and from a source of related resources. By storing the information from the document (documentary research) and the field information store (field research), it is a trial to find the right source formula for convey. The technology to the community then introduced the training kit to the successful completion of the group to the operators by focusing on participating practices.
 - 2.3 Research tools: Work practice activities, create, develop, and three-phase soap products, to develop the original formula, in the form of soap, crystal and liquid soap for elderly adults and those with sensitive skin. Participating observation (participant observation) researchers keep track of the time of a member in the practice conference group. Observed the solution while practicing After that, there will be more advice after practicing the problem of suspicious group members to plan to work continuously and to learn with the qualified team to develop products to solve smell and continuous production quality. And the conclusion of the experimental results is the new invention, a combination of basic formulations, a mixture of soap, cocoon and a red onion soap for learning to be the community business.
 - 2.4 Analysis of using explain the results of the experiment for experimental research and descriptive analysis for qualitative research.

RESEARCH RESULT

Research Center for the Herb Learning Centre of non-agriculture women's group baannoonkraseat, Kantharawichai-District Mahasarakham-province, is a traditional community of Mahasarakham Province. Develop a healthy herbal product for more than 20 years to be a learning center for people interested in Student. The student came to a long time until the anniversary celebrated 150 years "TAKASILA NAKRON" Education Center city of Thailand. The research and development of the community beauty products research. To help Thai farmers to bring local res ources, create more value by enhancing local wisdom. "The beauty Set of Cocoon and Shallot" is a soap and Cocoon and Shallot of Thai desserts soap. This research aims to provide a suggested formula to a resource base area to become a future community business.

Formula 1 innovation "Cocoon and Shallot soap"

Preparation of device

- 1. Glycerin Grade A 1 kg.
- 2. Cocoon Nangnoi Sisakeat 0.5 kg.
- 3. Shallot 0.5 kg.
- 4. Pandan Leaf 1 handful
- 5. Sugar 1 Tea Spoon
- 6. Salt 0.5 teaspoon
- 7. White Fabric 1 Piece
- 8. The smell of Thai Fower 0.2 CC.
- 9. Alcohol 1 bottom
- 10. 1 Water Sprayer
- 11. 2 mould
- 12. 1 Pot of 1
- 13. 1 Wooden Paddle
- 14. Ladle 1 an
- 15. 1 Roll Wrap Film

The production process of red onion soap per 1 kilogram

- 1. Remove shallot and smoothie Put the tank 1 night in order to make shallot reduce the pungent scent
- 2. It is a shallot that decreases the scent. Bring a lot of water and waste
- 3. Take the cocoon Nangnoi Srisakeat to boil the pandan leaves for 30 minutes and then bring it very well with some white fabrics.
- 4. Bring the glycerin grade A to a stew with the middle light. Temperature 50-60 degrees Celsius
- 5. When the glycerin dissolves, fill the boiled substances from the cocoon and shallot 4 tablespoons
- 6. Add 1 teaspoon of sugar so that the glycerin is clear and solid.
- 7. Add salt 0.5 spoon to nourish your skin and be a preservative in natural products.
- 8. The scent of Mook or Orcid 2 CC.
- 9. Prepare the print by bringing the prepared alcohol into the sterilization before pouring the ingredients cooked down to
- 10. Pour the ingredients cooked, then spray the bubbles with alcohol again.
- 11. Let the mixture harden for about 1 hour
- 12. Remove the soap from the print and wrap it with the film.
- 13. To be branded Enter the beautiful packaging box
- 14. Released for distribution.



Figure 4. Working together with the community

By experimenting with the development of beauty products in Formula 1, it has been the remainder of the production, which is a waste of the Shallot, giving the research to a new formula in order to use the ingredients in the production process. There is no rest in the system and bring the rest to the value and add more value. At the time of trial, consider Mor-kang Thai dessert with a shallot, and when you see a cocoon that has not been boiled. To commemorate the Foy thong sweets and Pandan leaves, reminiscent of Jelly and Kha nom Zaan Thai Dessert. The research and the community have agreed to make Formula 2 as Soap Thai dessert as expected. Make the community more creative and excited to learn during the trial period. In the near New Year festival, a soap that has been tried to be made is a gift set for the community.



Figure 5. Thai dessert soap Set

Formula 2 Thai dessert soap set: the equipment and ingredients are prepared just like part 1, but there are more ingredients to be similar to Thai sweets using creativity. By filling from the shallot and fibers from the cocoon, including the cleansing of Thai natural herbs such as:

- **1. Mor Kang Soap.** Cooking rice Soup The curry will have a shallot fragrance to boil the glycerin, bringing it to the second layer of aromatic soap in Formula 1 in front of
- **2. Kha Nom Saan Soap.** The remaining Pandan leaves are boiled to the 1st floor, and the coconut milk blends with glycerin to the second floor with a wisdom that is believed to help nourish the skin moist.
- **3. Foy Thong Soap.** The community has tried the silk line to remove the residual glycerin from the production. This small line is believed to be a very beautiful face and body scrub.
- **4. Kha Noon Soap** The community has brought the remaining cocoon to the rolling and the glycerin of the residual. The pot has a beautiful golden jackfruit too distribute the seeds and five Baht, remove the body scrub. This product in the market has been a great interest from teenagers for all four Thai desserts Master, this is just a preliminary recipe from the production that requires the rest of the production process to use the resources that have the highest benefit. By using creativity, develop the product from local wisdom. Interested people can also develop a lot of Thai desserts.

DISCUSSION

Cocoon and Shallot soap when finished, there is a beautiful amber yellow color. The skin is soft and moisture-free. This is the result of the adhesive water from the water, which is extracted from the flavor of the plant. In accordance with the research of the National Mulberry Institute Ratchaphrisek (Meesil, 2009) to disclose the results of the research showed that water is glued there is a large quantity of Nangnoi Srisakeat 1 compared to another cocoon. In particular, amino acids in this quality protein are absorbed into the skin cells, helping to stimulate the skin's collagen, which is a protein fiber that helps to firm skin. In addition, antioxidants and antimicrobial in Thai varieties powder also help remove toxins in cells, reduce inflammation of the cells, and reduce the amount of germs on the skin, resulting in a faster wound. Reduce inflammation from healthy skin Wrinkles are always younger and more youthful. The traditional Thai wisdom will believe that the shallot helps to nourish the skin and cure the flu. Young children time Sick will be recommended to bring shallot pounded and hung on the cradle, or can bring a big shallot. Detox Fever When a shallot comes to experiment with the community to learn, it has been a huge interest in the community because it is believed to be the same capital. For the shallot, from the experiment when bringing the red

aroma water to boil the glycerin will also be yellow. It is close to the cocoon, helping skin to shine and reduce inflammation of the two skin, it is a relatively low-end ingredient, and there is a Thai flavor. Use Thai scents to reduce the scent of shallot. The results are consistent with the concept and international research for the shallot, and the beauty found that sulfur in the red onion keeps skin youthful. Help the skin cells to relieve the red pain from insect bites. A sting can be applied to a shallot that will cause Verrucas to fall away (Stylecraze, 2018). The shallot contains vitamin A, which is beneficial to the skin. Skin Care & Enough (Bronzers (body)) The skin can be used to use a healthy body to remove dandruff and stimulate the hair growth (Nature and Garden, 2018).

The findings found that belief in the skin care of both Thai and foreign scents is consistent. In the future, a shallot should be developed as a more diverse beauty product. Thailand is one of the biggest shallot base product in ASEAN. By developing the foundation of creativity and innovation on the research base, together with educational institutes, it will lead to a wide variety of wisdom, products such as liquid soap for children and gentle skin. This concept is in line with the theory of hair removal, which is consistent with the theory 7 C development of the creative and innovative human capital. (Hongladarom & Pokaew, 2018). This Research Discover the development of human resources to be creative by stimulating the idea of thinking, as well as promoting the production of innovative products and services to create a society. Creative learning by keeping the same things as wisdom and enhancing the new things with continuous research and development. Learn together with community society When you get creative products, lead to creative and creative marketing communications. A new knowledge is spread to the public as well as the use of intellectual The power of wisdom community in order to accept new things together.

CONCLUSION

The research for the beauty of cocoon and shallot innovations sting Thai wisdom to develop community products from the cocoon and the shallot, as well as the sufficiency economic philosophy, has begun to develop a master of cocoon and shallot to develop the beauty formula. Thai Herbal soap is the remainder of the manufacturing process. Using creativity on the basis of sufficiency is the use of resources to maximize the benefit of the production process, it is a beauty formula that can be further capped into other products. Once you get the recipe and the product, the researchers want to publish this helpful basic formula to those interested in developing a career or a new business, especially the community. These two important resource bases can develop products from Thailand's wisdom to the international under the Community's good resource base to create value-added values from wisdom to Thai society. And the final goal is to develop Thai herbal business potential to be more strong from Thailand in the most potent country in the ASEAN market. It also has some interesting important information about Thailand's first alternative medical potential, which is ranked second in the world from China.

If Thailand and China have established relationships in developing herbal products for beauty, including more alternative medicine, Thailand and China will be continuing to be the world's top strength in herbs and traditional Thai medicine, and is more robust than ever. We have good relationships with both friendly and long-term relationship.

SUGGESTIONS

- 1. Encourage Baan Noon Kaset women group to be a learning center on herbal product processing. Continuing research results have been developed to lead to privatization for distribution. Will create a job, create a real career and publish useful information for the good health of community members. And the general public to realize the importance of Thai wisdom Beauty products that are processed from Thai herbs
- 2. When the research results indicate that Thai shallot Bang Chang Srisaket is a shallot that has the best quality in product development Research results should be extended to Technology transfer to the community in Srisaket Province for the farmers who grow shallot Will be a product development in the upstream source Help solve the problem of shallot with a low price Reduce processing costs and adding value to Thai shallots.
- 3. Extend results in developing other health products in more ways.

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REFERENCES

- Hongladarom, C., & Pokaew, T. (2018). *Vitamin creative human capital development and innovation capital development*. Bangkok: Triple Education Group.
- Karunamaiwong, P. (2003). Thai herbal processing. Bangkok: Chulalongkorn University Book Center.
- Khaosod. (2016). Silk powder benefits for health and beauty. Recorded on 8 Aug 2016 Searched on 19 May 2018. Nature, & Garden. (2018). Shallot: Health benefits and therapeutic value. http://www.nature-and-garden.com/health/shallot-health.
- Meesil, P. (2009). *Turn over waste, worthless silk, with a price increase in the value of local waste.* Retrieved 22 Jan 2009 from https://Mgronline.com/science/detail/9520000005347.
- Public Relations Department. (2018). *The department of traditional Thai medicine and alternative medicine drives the development of Thai herbs as an economic plant.* Retrieved 15 May 2018 from http://nwnt.prd.go.th/CenterWeb/News.
- Ratanakom, P. (2011). The study and development of herbal products, processing and packaging to promote community careers. Bangkok: The Innovative Design Director.
- Srinakrarintaraviroj University. (2018). Trend nano technology cosmetic/ cosmetic Thai herbs 2018. *Post today*. Save on 4 Jan 2018 Searched on 14 May 2018 https://www.posttoday.com.
- Stylecraze. (2018). *13 amazing benefits of shallots for skin, hair, and health.* Http://www.stylecraze.com/articles/benefits-of-shallots-for-skin-hair- and Health.
- Tanthanee, S. (2018) Natural protein cocoon for skin health care. Department of Science Service, 66(207), 14–17.
- Tepyaa, N. (2006) The magic of herbal soap. Yala Rajabhat University, 1(2), 156–164.
- Wankaew, K. (2016). Processing of the product from the Acanthus leaf for health beauty of Baan Bang Tib Khura Buri District Phang Nga Province. Department of Community Development Faculty of Humanities and Social Sciences.

TRI NING DANU SUSTAINABLE TOURISM DESTINATION MODEL IN BEDUGUL TOURISM AREA, BALI

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ABSTRACT

This research aims to formulate a sustainable tourism development model on three lakes in Bali or Tri Ning Danu. The model is designed based on existing features and strategic issues that have been identified which consist of seven variables, specifically: physical characteristics; typology and ideology of actors; tourism capital; type of community participation; typology of tourists based on actual and potential markets; life cycle of the destination area; and government policy. The scheme that formulated as a model for the integrated and sustainable development of Tri ning Danu tourism destinations with reference to the seven variables. This model is well-known MASTIM that stands for Mass-Alternative-Spiritual Tourism Integrated Model based on the concept of spiritual-ecotourism.

Keywords: *Tri ning danu, model, sustainable, tourism destination.*

INTRODUCTION

This research addressed to formulate a sustainable tourism development model on three lakes which are located in Bedugul Tourism Area, Beratan Lake, Buyan Lake, and Tamblingan Lake. The model are design based on strategis issues that have been identified and consist of seven variables, which are: Physical characteristic of Tri Ning Danu (v1); Typology and Ideology of Actors (v2); Tourism Capital (v3); Types of Community Participation (v4); Tourist Typology based on actual and potential tourism market (v5); Life Cycle of Destination Area (v6); Government Policy (v7).

In order to achieve those goals, it will be carried out in two phase:

- 1. Conduct an analisys of existing features and strategic issues related to the seven variables
 - a. Analysis of physical condition related to water quality and quantity of the lake
 - b. Analysis of Bedugul tourism stakeholder's ideology
 - c. Analysis of tourism capital
 - d. Analysis of local community participation types
 - e. Analysis of tourist typology identification related to actual and potential tourism market
 - f. Analysis of tourism destination area's life cycle
 - g. Analysis of government policy
- 2. Model design
 - a. Accumulated analysis as the base for designing sustainable tourism destination model based on Tri Ning Danu in Bedugul tourism area
 - b. Document preparation of analysis and sustainable tourism destination model design of Tri Ning Danu in Bedugul Tourism Area

LITERATURE REVIEW

The development of sustainable tourism is based on empowerment efforts, both in economic, social and cultural terms, which are a model of tourism that can stimulate the growth of socio-cultural and economic quality of the community and ensure environmental sustainability. The basic idea of sustainable development is the sustainability of natural and cultural resources. These resources must be maintained and preserved so that they can be used in the future. The use of these resources must involve local communities and provide optimal benefits for them (Damanik & Weber, 2006; Mowforth & Munt, 2004; Fagence, 2000).

In addition, according to Mowforth and Munt (2004), the concept of sustainable tourism development includes three components that are interconnected with one another, as follows:

Ecological Sustainability means that tourism development is not caused by irreversible changes in an existing
ecosystem, and is a generally accepted dimension since the need to protect natural resources from the negative
impacts of tourism activities.

- 2. Social Adaptability, in accordance with the ability of the community group to adapt with tourists without causing disharmony in social relations, both among members of the group with tourists, or between fellow members of the group.
- 3. Cultural Sustainability, in this context, assumes that the impact of the presence of tourists in a tourist destination does not have a negative impact on the development of local culture, but the existence of such cultures must be maintained for next generations.

Furthermore, to achieve the goal of sustainable tourism development, two approaches are needed in relation to tourism. Fagence (2000) shows two models related to sustainable tourism. First, horizontal linkage, this approach implies that tourism is a facilitator of various programs and policies that will be implemented. In order for the process to be efficient, various components of policies that are mutually supportive are needed to be able to understand the problem clearly, define the vision and mission of development, understanding the hierarchy of program goals and objectives, and organizing the process well. In this approach tourism is a component of the process that runs parallel to other fields so that collectivity is needed. Second, vertical linkage, the purpose of this approach is to find a balance of combining the important components of tourism and development activities to produce various creative breakthroughs in decision making.

In this study, the discourse of sustainability in the implementation of tourism also considers the approaches as above. The new thing to do in this research is to add variables in assessing the existing aspects of the research location, namely lake-based tourism areas, which consist of:

- 1. The ideology of tourism stakeholders; is an interpretation of the realm of tourism based on the truth value that is believed and guides the actor in acting.
- 2. Tourism capital; is a resource owned by a destination that determines the peculiarities of tourism products offered to tourists, which consist of: physical environmental capital, economic capital, social capital, cultural capital, symbolic capital (Adi, 2008; Bourdieu, 1990; Field, 2010)
- 3. Level of participation of local people; is the level of involvement of local communities in the implementation of tourism in the region related to aspects of involvement in decision making and sharing of tourism benefits (Adikampana, Pujani, & Nugroho, 2018; Tosun, 2000)
- 4. Tourist typology related to the actual and potential of the tourism market; is a tourist who comes based on the interaction, motivation and products offered (Murphy, 1985).

This research offers a new approach to interpreting the sustainable tourism model. The thinking framework used previously in the discourse of sustainable tourism departs from the assumption of modernism, which is still anthropocentric in nature, although it has included environmental variables in its studies, but still at the level of axiology (ethics) in the context of human relations with nature. That implies the truth criteria that are built are still in subjective (individual) and intersubjective (social agreement). This study utilizes a critical realism approach at the epistemology level (Bhaskar, 1990) and ecophenomenology at the ontology level (Saraswati, 2013), so that objective and subjective truths are obtained, which are seen as more adequate in interpreting the reality of tourism.

RESEARCH METHOD

The type of research conducted is field research using a mixed method. The mixed method is a method that combines qualitative and quantitative approaches in all stages of the research process (Tashakkori, & Taddlie, 2010). This type of research is considered capable of producing more comprehensive facts, because these researchers have the freedom to use all data collection tools according to the type of data needed to achieve the research objectives.

The Mixed Method is also referred to as a methodology that provides philosophical assumptions in showing directions or giving instructions on how to collect data and analyze data, and the combination of quantitative and qualitative approaches through several phases of the research process. Hesse in Sarwono (2011) suggests two ways to make a mixed research design. The model is differentiated based on objectives, namely the design of parallel mixed methods and the design of sequential mixed methods.

This research was located in the Bedugul Tourism Area, Bali and the scope covers ecological aspects, socio-cultural aspects, and tourism aspects in Bedugul Tourism Area. Ecological aspects in the form of data on physical environmental capital; socio-cultural aspects in the form of related data about the ideology of tourism stakeholders and data on economic capital, social capital, cultural capital, and symbolic capital. While the tourism aspect is related to

tourist typology. Research was designed using parallel mixed methods. Parallel design using both studies (quantitative and qualitative) in a separate way but in the same research activities. Domination is given to the qualitative component. Research begins by setting specific goals, which are then spelled out with aspects of the data to be sought. The next step is to design a mixed method, namely quantitative and qualitative research design to find data in accordance with the research objectives. After the data has been collected, the data is analyzed so that the findings can be concluded.

FINDINGS

Existing Features of Tri Ning Danu Tourism Destination

Existing features of Tri Ning Danu consist of: (i) physical characteristic of the lake (water quality and quantity); (ii) actor's typology and ideology, consist of: main actor (actor with direct access to the lake and live around the lake area), types of actor's interpretation (touristic, ecology, theology), (iii) tourism capital (economy, social, culture, symbolic), (iv) community participation type (coercive, induced, spontaneous); (v) tourist typology based on tourism actual and potential market (market source, motivation, typology, length of stay, visitation behavior, source of information and spending pattern); (vi) tourism destination life cycle (exploration, involvement, development, consolidation, stagnation); and (vii) government policy.

Table 1 Existing Features of Tri Ning Danu

¥72-11	Lakes in Bedugul Tourism Area				
Variables	Beratan	Buyan	Tamblingan		
Physical characteritic	62.960.000 m ³	96.733.443 m ³	33.530.000 m ³		
- water quantity	Severely polluted	Moderately polluted	Mildly polluted		
- wáter quality					
Typology and ideology of actor	Local community	Government (BKSDA)	Government (BKSDA)		
- main actor	Touristic-Theological-	Ecological-Touristic-	Ecological-Touristic-		
- interpretation type based on	Ecological	Theological	Theological		
dominant order					
Tourism capital	Complete	Deficient	Mediocre		
Types of community participation	Spontaneous	Coerced	Induced		
Tourist typology	French, Germany, Australian	French, Australian, USA	Holland, French, UK, China		
- Market source	Natural and cultural	Natural and cultural	Natural and cultural		
- Motivation	Day visitor	Day visitor	Day visitor		
- Typology	2 night	1 night	1 night		
- Length of stay	First timer, in group	First timer, in group	First timer, in group		
- Behavior	Guide book, internet, WOM	Guide book, travel agent	Internet, travel agent, guide		
- Information source	IDR 450.000	IDR 350.000	book		
- Spending			IDR 300.000		
Destination stages	Consolidation	Involvement	Exploration		
Government policy	Have not maximally acted as regulators and facilitators	Have not maximally acted as regulators and facilitators	Have not maximally acted a regulators and facilitators		

Strategic Issues of Tri Ning Danu Tourism Destination

Furthermore, after acquiring the three lakes outlined in Table 1 concerning the existing features of the tourist destination Tri Ning Danu, further exploration of strategic issues is carried out on each lake. The strategic issues found will be the base for the model of sustainable tourism destination development on the three lake. The strategic issues that have been obtained are outlined in Table 2.

Table 2 Strategic Issues of Tri Ning Danu

Stratogia Isono	Lakes in Bedugul Tourism Area				
Strategic Issue	Beratan	Buyan	Tamblingan		
Physical characteritic	 Degradation of water quality resulted by the presence of heavy contamination from pollutant caused by tourism activity Construction of spillways (valves/water holes for dams) that pay less attention to lake physical factors, cultural factors of local communities, 	 Degradation of lake water quality with moderate sedimentation and pollution due to pollutants caused by community agricultural and fisheries activities Massive growth of weeds (Selvinea) that begin to cover some part of the lake 	- Degradation of lake water quality in the presence of sedimentation and mild pollution due to pollutants		
Typology and ideology of acto	and factor of tourism needs	 Elitism by quasi-internal actor Tourism based coercion by BKSDA phenomena Mainstreaming of ecologic interpretation 	- Elitism in tourism practices with the domination of quasi internal and external actors (BKSDA, local government, and investor		
Tourism capital	Lack of variations in tourist attraction products offered resulting in monotonous attraction	Lack of variations in tourist attraction products offered resulting in monotonous attraction	Lack of variations in tourist attraction products offered resulting in monotonous attraction		
Types of community participation	Although it has the spontaneous participation level, it is still informal	Level of participation is very low, which is coerced participation	Level of participation relatively low which is induced participation		
Tourist typology	The dominance of day visitor	The dominance of day visitor	The dominance of day visitor		
Destination stages	In consolidation level. If it is not vigilant it will slide down to the stage of stagnation	Relatively low level which is involvement	Very low level which is exploration		
Government policy	Weak coordination/ sectoral, partial, and elitist ego	Weak coordination/ sectoral, partial, and elitist ego	Weak coordination/ sectoral, partial, and elitist ego		

Intergrated and Sustainable Development Model of Tri Ning Danu Tourism Destination

The integrated and sustainable development of Tri ning Danu tourist destinations is formulated based on the strategic issues that have been acquired. Furthermore, based on this matter a representative development strategy is carried out.

Table 3
Tourism Development Strategy of Tri Ning Danu

Davidson and Streetson	Lakes in Bedugul Tourism Area					
Development Strategy	Beratan	Buyan	Tamblingan			
Physical characteristic	Efforts are needed to glorify the lake's physical environment	Efforts are needed to glorify the lake's physical environment	Efforts are needed to glorify the lake's physical environment			
Typology and ideology of actor	 Decomposition of interpretations into theological-ecological-touristic Deconstruction of tourism-based coercion practices 	 Decomposition of interpretations into theological-ecological-touristic Deconstruction of tourism-based coercion practices Encouraging local community as internal and main actor 	 Decomposition of interpretations into theological-ecological-touristic Mainstreaming the local community in tourism Encouraging local community as internal and main actor 			
Tourism capital	- Efforts needed to intensify (quality improvement) and	3	- Efforts needed to intensify (quality improvement) and			

Davidanment Strategy	Lakes in Bedugul Tourism Area				
Development Strategy	Beratan	Buyan	Tamblingan		
	extensification (quantity increase) are needed related to natural and cultural tourism-based tourism products - Ethical change of local community from passive to active	natural and cultural tourism- based tourism products - Ethical change of local community from passive to	extensification (quantity increase) are needed related to natural and cultural tourism-based tourism products - Ethical change of local community from passive to active		
Types of community participation	Keep maintaining the level of spontaneous participation, by aiming it to authentic participation	Escalate the level of participation to spontaneous level	Escalate the level of participation to spontaneous level		
Tourist typology	 Tourism product component maximization Transposition from day visitor to repeater tourist Expanding the market share 	 Tourism product component maximization Transposition from day visitor to repeater tourist Expanding the market share 	 Tourism product component maximization Transposition from day visitor to repeater tourist Expanding the market share 		
Destination stages	Maintaining the consolidation phase	Escalating the level to development phase	Escalating the level to development phase		
Government policy	±	t Required a new institution that has the authority to manage Tri ning Danu as a regulator and facilitator	Required a new institution that has the authority to manage Tri		

MASTIM (Mass-Alternative-Spiritual Integrated Model)

The following Scheme formulated as integrated and sustainable development models of Tri Ning Danu tourism destination by referring to existing features and current strategic issues. This model is named MASTIM, which abbreviated from Mass-Alternative-Spiritual Tourism Integrated Model based on concept of Spiritual based Ecotourism (SBE). MASTIM is a new model found based on empiric findings related with type of interpretation of actors that live around Tri Ning Danu, which are: Touristic, Ecologic, and Theological. These three interpretations are conceptualized as spiritual based tourism.

CONCLUSION

Based on previously discussions, conclusions can be drawn as following:

- 1. Accordance the analysis on existing profile of Tri Ning Danu, at least seven strategic issues related with: physical characteristic of tri ning danu, typology and ideology of actors, type of community participation, tourist typology based on actual and potential market, destination area's life cycle, and government policy.
- Furthermore, integrated and sustainable development model design for Tri Ning Danu tourism destination by referring to existing profiles and current strategic issues has been drafted. This model is named MASTIM which is an abbreviation of Mass-Alternative-Spiritual Tourism Integrated Model based on spiritual and ecotourism concept.
- 3. This model emphasizing on institutional establishment such as Tri Ning Danu Forum that is expected to be able to establish a structure of tourism in Bedugul Tourism Area which include three lakes: Beratan, Buyan and Tamblingan in integrated and sustainable manner.

Some recommendations according to the conclusions are:

- 1. Tourism stakeholders in the Bedugul Tourism Area are expected to synergize in order to create integrated and sustainable tourism practices in the three existing lakes.
- 2. MASTIM is expected to become reference for tourism stakeholders to achieve objectives by assembling in Tri Ning Danu Forum
- 3. Further research on applicative model is needed, especially a more comprehensive and coherent study on Tri Ning Danu Forum related to its structure, to acquire knowledge about its structure, system and practice.

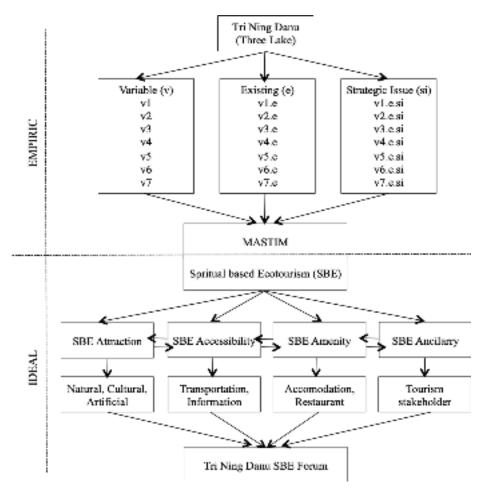


Figure 1. Tri Ning Danu tourism model

REFERENCES

Adi, I. R. (2008). *Intervensi komunitas pengembangan masyarakat sebagai upaya pemberdayaan masyarakat*. Jakarta: PT Raja Grafindo Persada.

Adikampana, I. M., Pujani, L. P. K., & Nugroho, S. (2018). Partisipasi masyarakat lokal dalam pengembangan kawasan pariwisata Candidasa. *Jurnal Kajian Bali*, 088(01), 53–70.

Bhaskar, R. A. (1991). *Philosophy and the idea of freedom*. London: Blackwell.

Bourdieu, P. (1990). The logic of practise, (Translated by Richard Nice). Stanford, CA: Stanford University Press.

Damanik, J., & Weber, H. F. (2006). *Perencanaan ekowisata dari teori ke aplikasi*. Yogyakarta: PUSPAR UGM dan Andi.

Fagence, M. (2000). Cultural sensitivity and planned responses - Aspectrum of initiatives to meet the expectations of differentvisitor types whilst 'protecting' the cultural resources. In M. Robinson, P. Long, N. Evans, R. Sharpley, & J. Swarbrooke (Eds.), *Expressions of culture, identity and meaning in tourism* (pp. 69–86). Sunderland: Business Education Publishers.

Field, J. (2010). *Modal social (Social capital)*. Edisi Indonesia. Nurhadi (Penerjemah). Inyiak Ridwan Muzir (Ed.). Bantul: Kreasi Wacana.

Mowforth, M., & Munt, I. (2004). Tourism and sustainability: New tourism in the third Word. London, UK: Routledge.

Murphy, P. E. (1985). *Tourism a community approach*. New York-London: Methuen.

Saraswati, P. L. G. (2013). *Relasi manusia dan alam: Perspektif ekofenomenologi*. Disertasi Doktor. Fakultas Ilmu Budaya Univeristas Indonesia.

Sarwono, J. (2011). *Metode penelitian kuantitatif & kualitatif*. Yogyakarta: Graha Ilmu.

Tashakkori, A., & Taddlie, C. (2010). *Mixed methodology: Mengombinasikan pendekatan kualitatif dan kuantitatif.* Yogyakarta: Pustaka Pelajar.

Tosun, C. (2000). Limits to community participation in the tourism development process in developing countries. *Tourism Management*, 21(6), 613–633.

GASTRONOMY TOURISM IN UBUD

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ABSTRACT

Ubud has been recognized as an international tourist destination because of its traditional cultural tourist attraction, and currently has a great opportunity to be designated as the UNWTO Prototype as a world gastronomic destination. The purpose of this study was to analyzed the Ubud's potential as a gastronomic tourism in terms of history, authenticity and uniqueness that can increase the opportunity of Ubud becoming more widely known as a gastronomic tourist destination. As a result, from the historical aspects found that the existence of Yeh Pulu Subak which has historical value in Bali agriculture and from its uniqueness and authenticity, Ubud's local food has a unique taste that come from the *Base genep* that represents the taste of local food.

Keywords: Gastronomy tourism, history, authenticity, uniqueness.

INTRODUCTION

The Importance of Gastronomy in Ubud

Gastronomy is a tool to facilitate understanding of cultural heritage well. Tourists who are traveling are looking for something authentic and a transparent travel experience. Local food provides everything for tourists, like a lens, food reveals the history, people, and culture of the destination they visit. Even so, TV shows and cooking shows and even cooking competitions are very important nowadays and very popular. Gastronomy also acts as a protector of cultural authenticity because gastronomic development in a destination can protect local food traditions, food ingredients and spices, and culture. It is emphasized by Boutsioukou (2018) that at present the destination that dares to introduce local food globally refers to gastronomy, this leads to a more local destination. More destinations embraced localism when it comes to food and drinks destinations where there is a lot of localism when it comes to gastronomy - they are turning to local (Boutsioukou, 2018).

Hall and Sharples (2003) explain about gastronomy travel is the experience gained by tourists as a whole related to food. The main purpose of the trip is to enjoy food at the destination and link it to attractions, entertainment festivals, exhibitions, cooking shows and markets that sell local products directly from the farmers. Gastronomy tourism is very identical to lifestyle including experience gained by studying cultural differences, understanding the attributes and quality of the products produced at a destination.

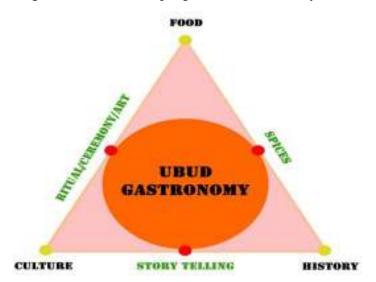
Gastronomy is interpreted as the art of eating in order to distinguish it from the culinary emphasis on the art of cooking (Ketaren, 2019). Gastronomy is in eating and eating procedures. The beginning of the gastronomic word is known through a poem written by Jaques Barcheux in 1804, the growing popularity of this term throughout the gastronomic world is now so well known that the growth of restaurants offering a variety of foods and classes is sought by enthusiasts including tourists who are now competing looking for types of foods in various corners of tourist destinations.

Indonesia itself gets various gastronomic influences from various ethnic and ethnic groups in Indonesia. For example, China, Arabia, India, which adds a diversity of Indonesian food tastes. Regarding gastronomy in Indonesia certainly has a lot of potential. One of the popular Ubud destinations is introduced as the international village of Bali. Gastronomy in Ubud can also be said to have a plus because the history and culture contained in Balinese food in particular in this destination is very strong and still competes with other gastronomic destinations.

Ubud gastronomy can be formed from three factors, namely culture, history, and food, this concept was developed from a triangle gastronomy of Indonesia which is reinforced by the aspects possessed by Ubud as a gastronomic destination.

Triangle Concept on Ubud is an adaptation of a triangle on Indonesian Gastronomy cited from the UNWTO report 2nd Global report on gastronomy tourism in 2017. The main aspects discussed are food which is the main center of gastronomic aspects, influenced by cultural, ritual, and spices. Next is culture, the story behind food. Stories about food will enliven the values of food that can be lifted from rituals and ceremonies including the process of cooking

authentic food and having traditional flavor. Finally, history, local food was influenced by the history of the kingdoms that led the archipelago since the 16th century and in the 18th century the spice trade began.

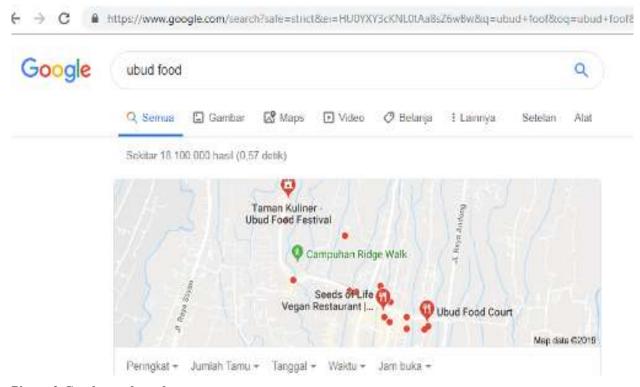


Picture 1. Ubud triangle gatronomy

Source: Putra, Raka, Yanthy, Aryanti, and Pitanatri, 2018

Ubud as a Gastronomy Destination

The development of Ubud as a gastronomic destination arises because the development of trends and lifestyles of the community is supported by the strong growth of interest of tourists who are looking for original experiences while visiting this destination. The cultural and historical values contained in Ubud's local food are the great potential of Ubud. To see the development of the tourist trend that is looking for local food can be seen from searches on Google Search for example by using a number of keywords such as Ubud food there are 18 million Google search results which means Ubud local food searches are trending by the tourist. Food reputation is an important factor when choosing a holiday destination.



Picture 2. Google search result

Source: Google search 2019

RESEARCH METHODS

The qualitative method uses data collection techniques through library research techniques that utilize literature, literature, text, data through libraries. This library technique is also known as library research because it is done in a library or desk research. Data sources were also obtained through interviews with various parties, namely PENTAHELIX Ubud, which was involved in preparing Ubud as a destination for the UNWTO Prototype.

RESULTS AND DISCUSSION

Ubud as UNWTO Gastronomic Prototype

Determination of Ubud as a gastronomic destination is the first in the world and an example for other destinations in Indonesia such as Bandung and Joglosemar (Yogyakarta and Semarang). Ubud is designated as a gastronomic prototype with the UNTWO standard with the initial step of conducting a potential inventory and gastronomic attractions including the readiness of various parties involved. To become a UNWTO prototype, Ubud is assessed by five standards, namely lifestyle, local products, culture and history, the story behind food, and nutrition and health. The potential possessed by Ubud is diverse so that by making Ubud a gastronomic destination it will provide welfare from upstream to downstream, so that people feel the impact. The gastronomic destination of Ubud is formed holistically which prioritizes cultural heritage values, local quality products or food ingredients that come from traditional markets and organic products, superior gastronomic amenities and elevates local wisdom, has formal and informal gastronomic learning places such as cooking classes and schools) who focus on local wisdom in Ubud (Dimyati, 2019).

Gastronomic products in Ubud can be an attraction for wizards because they see the current global trend of champions looking for authentic experiences that can provide a quality story context. As a means of diplomacy, of course, the gastronomic product of Ubud will be easily popular in the global market and can compare Ubud specifically. The process of the first stage in the establishment of Ubud as a UNWTO Prototype has been carried out for 1.5 years beginning in 2017 and has now entered the second phase of the process of deepening and the first assessment of Ubud in June 2019 and continued with the second stage of assessment in August 2019 (Kholisdinuka, 2019).

Tourism Minister is very enthusiastic and optimistic about this program because to be the best it needs a long process and commitment from all parties involved. "Being the best will increase 3C like when we won world awards namely Credibility, Confidence, and Calibrate. Likewise, this gastronomic destination program with the standard of UNWTO will be the achievement of Indonesian tourism to be the best in the global, "he said (Nikson, 2019).

UNWTO's lead expert, Roberta Garibaldi, said UNWTO had three assessment processes for the title: namely an inventory of gastronomy assets and attractions, which includes a mapping of the readiness of industry and business players, a process verification and analysis that includes interviewing all gastronomy stakeholders, producers, hotels, restaurants, chefs, food festival initiators, regional administrations, transportation providers, academics and tourists who are required to be implemented by the stakeholders (Mahendra, 2019).



Picture 3. Spice and local vegetable in Ubud

Potential Gastronomic Tourism in Ubud

As a gastronomic destination, Ubud has a variety of tourist attractions, from historical heritage to interesting and related digital attractions both directly and indirectly with gastronomic tourism. The potential of gastronomic tourist attraction in Ubud can be seen tangibly from the existence of historical sites that tell of food gathering activities, ancient artifacts related to food activities and the availability of a variety of culinary forms that can be served to tourists. While intangible things that can be used as an attraction include the culture of processing and serving food, the story behind traditional food both in terms of history and philosophy.

If traced deeper into gastronomic tourism is part of cultural tourism. Gastronomic tourism is a cultural tourism that explores and puts forward the culture of eating a community group. As revealed by Gillesoie and Cousin (2001) quoted in Wikipedia that gastronomy is a study of food as part of a cultural component, while according to Savarin (2009) gastronomy is defined as a science that deals with everything related to human food.

Gastronomy that is often identified with traditional food is an ethnic identity because food is central to the rituals of daily life, habits, and traditions of an ethnic group. Traditional food ingredients, agricultural methods or systems and geographical conditions are factors that cause food to reflect the identity of a culture (Elbert, 2011). To be able to make gastronomy as a tourist attraction according to Damanik and Weber (2006) at least the gastronomy must be unique, originality, authentic and diversity

Historical Value

Food is a basic human need. Various sciences and technologies developed in order to meet these basic needs gave birth to various civilizations of human culture. Differences in geographical conditions and local expertise give birth to different gastronomy in different places. The length of human civilization in its efforts to fulfill its food needs gave birth to historical values and folklore related to food. Likewise in the Ubud area of Gianyar, various historical and historical relics of traditional foods color the gastronomic development of Ubud.

Gastronomy can be said to start from farming activities that have been carried out since human entered settled civilization to meet food needs. World agriculture is believed to have begun since the 800th century BC by the Romans (White, 1970). The farming activities of the Ubud community itself began with the arrival of Rishi Markandeya to Bali in the 8th century AD. the arrival of Rishi Markandeya in Bali coincides with the beginning of Balinese history. The story of Maharesi Markandeya's arrival and my buying journey to build a farming system in Bali gave birth to various stories and historical relics that have the potential to be used as a gastronomic tourist attraction.

The word Ubud itself originating from the word Ubad originated from a Maharesi journey that carried out purification in a Campuhan (meeting two rivers) between the Wos Lanang and Wos rivers. drug). until now the river that flows from the two rivers is called the Campuhan river which flows in the heart of the Ubud area.

The story of Maharesi markandeya in spreading agricultural activities then continued into the era of the ancient Balinese kingdom in the 9th century until the 14th century where agriculture began to be organized more modernly marked by historical relics and various artifacts or inscriptions made in the kingdom Ancient Bali led by the Warmadewa dynasty. such as the irrigation system which is still used today, the subak system was introduced during the reign of Marakatta (King of the Warmadewa dynasty).

Archaeological remains such as Pura Tirta Empul, and the site of Pulu indicate that gastronomic activities in the area of Ubud have been started long ago. Pura Tirta Empul is a spring that was dammed by Sri Chandrabayasingha Warmadewa which was channeled to irrigate the fields of the Subak Kulub and Subak Pulagan (Ardhana & Setiawan, 2014). Subak Pulagan itself can still be found in the Ubud area. While the Yeh Pulu site is one of the historical legacies that provides a clear picture of the process of hunting and agriculture in a wall relief that stretches along 26.5 meters.

Various inscriptions that mention the gatronomy developments of Ubud have also been found around the area of Ubud. as in the Serai A II inscription, Sading A, Abang Pura Batur A / (Goris, 1954) which is a relic of the ancient Balinese era, there are many mentioned food ingredients which are still consumed today by the Balinese and Ubud communities in particular.

Still from Maharesi Markandeya's journey story, before starting the work to plant forest to be used as agricultural land begins with a ritual to invoke such salvation as well after clearing the forest a ritual is performed by offering various food items that have been collected as a form of gratitude to nature and its creator. Until now, Balinese people generally, every activity starts always with rituals and ceremonies where food becomes an important ingredient in every activity. Likewise, in Ubud cannot be separated from religious rituals and customs that are binding and passed down through generations and carried out by various generations of society.

Starting from food for religious rituals and giving birth ceremonies, various forms of processed foods, which have various values and philosophies. The procedure for processing food for rituals is even arranged in the Darma Caruban ejection text. Processed foods are divided into processed foods and processed offerings where special food preparations are made only for ritual and ceremonial needs. The process of processing and presenting food both communally and individually gives birth to various forms of cultural societies such as culture, prominence or magibung.



Picture 4. Ubud local menu in megibung activity

Uniqueness and Authenticity

Packaging the ideal tourist attraction must be unique, authentic, original and diverse (Damanik & Weber, 2006). Potential gastronomic tourist attraction of Ubud has a variety of unique and authentic forms. From the tangible side, Ubud has a wide range of agricultural landscape, historical heritage and a variety of culinary that can be enjoyed by tourists. Intangible Ubud has a unique variety of dining cultures both related to religious rituals and ceremonies, and there are also stories behind interesting traditional foods.

The form of traditional culinary offerings of the Ubud community is inseparable from the available ingredients and their needs in the life of Ubud community. As previously stated, wetland agriculture has been developing since the 8th century (known as the subak irrigation system), which produce rice as the main product.

Rice for the people of Bali is generally believed to be the main source of life and prosperity which is a gift from the gods. The process of planting rice as well as processed dishes that are ready to be eaten, is always followed by various ceremonies both in small and large scale that following the process of growing rice. Various ceremonies or rituals carried out by rice farmers are based on the philosophy of Hinduism known as Tri Hita Karana. Rice are the most important means of ceremonies in all forms of Balinese rituals and ceremonies (Agung, 2010). Rice plants may be found elsewhere, but the traditional farming activities of the Ubud community and the various rituals and ceremonies that follow it, certainly have their own uniqueness that cannot be found anywhere else.

Likewise with food offerings, especially traditional food, Ubud people have their own uniqueness. The way of processing, presentation and stories behind traditional food (as well as stories about rice) of the Ubud community also has the potential to be a tourist attraction that has a fairly high authenticity because it has a history that can be proven by the existance of heritage. Various types of traditional Balinese dishes such as betutu, pork guling, lawar and satay lilit have even been served as dishes at various restaurants and hotels in Ubud.

In general, traditional Balinese cuisine is very dependent on the strength of the spices. Base Gede (complete spice) is one of the spices used in most traditional Balinese dishes. Like rice, the Balinese seasoning is also believed by the Balinese as a gift of God. The story behind this spice starts from the Mahabarata legend where the pandawa of the brothers (Yudisthira, Bima, Arjuna, Nakula, Sahadewa and Drupadi) do yoga semadhi to be endowed with the power of taste. The prayers were granted by the gods by conferring the salty taste in the form of kencur (Kaempferia galanga), the taste of bitter in the form of galangal, pungent taste in the form of turmeric, spicy taste in the form of ginger, sweetness in the form of shallots and garlic and sour taste in the form of lime.

In addition to the Pandawa legend, Base Gede materials are also mentioned in Batur Pura Abang A (dated 9th century) such as chili, red onion, garlic, galangal, kencur, turmeric, ginger, pecan, coriander, cardamom, orange, and coconut, which has been cultivated in Bali since the reign of ancient Balinese kings (Aryanti, 2014).

Traditional cuisine of Ubud people that can be said to be authentic one of them is chicken / duck Betutu. It is said authentic because the ingredients of the making have been mentioned in ancient Balinese inscriptions, this dish is present in every religious ritual and ceremonies activity of the Ubud community, and the processing is quite unique.

The history of chickens and ducks or poultry as dishes has been known since the days of the Ancient Balinese Empire. In the Serai AII IV.1 inscription mentioned royal officials who were visiting were given chicken meat dishes. This shows that in the ancient Balinese kingdom even chicken became a valuable dish given to royal officials.

In religious rituals chicken or duck betutu have a philosophy as an embodiment of the request for holiness and dharma before the gods. Betutu form where the head is bent toward the abdomen and closed part of the wing describes the attitude of people who are yoga. The processing of betutu chickens in Ubud in particular has its own uniqueness where the chicken / duck that has been covered with Base gede is then tied and wrapped with coconut fronds before being roasted under the coals of rice husk.

In addition to traditional chicken betutu which can be said to be authentic in the area of Ubud is a guling and lawar pork which is made from pork and of course seasoned with Base gede. In the religious rituals of guling pork, it has a philosophy as a symbol of prosperity and prosperity. Likewise, lawar has four kinds of colors (white, yellow, red and green) where each color is a symbol of the gods.

CONCLUSION

Ubud has been known as a tourist destination in Bali that has natural beauty as well as the uniqueness of its traditional culture. However, Ubud also has the potential for tourist attraction which can be packaged in the form of gastronomic tourism.

Ubud has a variety of relics and historical stories related to the gastronomy of the Ubud community. Gastronomic cultivation in Ubud stems from agricultural activities that have been developed since the days of the ancient Balinese kingdom (8–14th century AD). Stories and historical relics related to the gastronomy of Ubud can still be seen today which can be used as tourist attractions that can be visited such as Yeh Pulu site, Tampak siring, and subak Pulagan.

These stories and historical heritage support the authenticity of the gastronomic tourist attraction of Ubud. While the function of traditional food in the Ubud community as a dish and offering gives birth to a unique and authentic gastronomic culture as a tourist attraction.

The big potential gastronomic tourism which is owned Ubud would be stronger if the support the people of Ubud. Therefore, there should be socialization to all community in Ubud. Because commuity awareness needs to be raised to support every positive activity for the advancement of tourism. Even more important is building the commitment of the community, especially the Ubud community to succeed in the gastronomic acceleration program. The presence of gastronomic tourist attraction based on local wisdom is expected to be able to live, grow and develop as other tourist attractions. The Ubud community that has made tourism a part of their lives, the tourist attraction that they have has increased with the presence of gastronomy (culinary). With hope, the presence of gastronomy can support, strengthen, and make Ubud more complete as a world tourist attraction.

REFERENCE

- Agung, N. M. (2010). Pawon Bali 60 resep masakan khas Bali pilihan. Jakarta: Gramedia.
- Ardhana, I. K., & Setiawan, I. K. (2014). *Raja Udayana Warmadewa: Nilai-nilai kearifan dalam konteks religi, sejarah, sosial budaya, ekonomi, lingkungan, hukum, dan pertahanan dalam perspektif lokal, nasional, dan universal.* Denpasar, Bali: Pustaka Larasan bekerja sama dengan Pemerintah Kabupaten Gianyar.
- Aryanti, N. N. S. (2014). Menelusuri jejak gastronomi jaman Raja Udayana (Warisan budaya gastronomi sebagai daya tarik wisata). In I. K. Ardhana, & I. K. Setiawan (Eds.), *Raja Udayana Warmadewa: Nilai-nilai kearifan dalam konteks religi, sejarah, sosial budaya, ekonomi, lingkungan, hukum, dan pertahanan dalam perspektif lokal, nasional, dan universal.* Denpasar, Bali: Pustaka Larasan bekerja sama dengan Pemerintah Kabupaten Gianyar.
- Boutsioukou, K. (2018). *Key trends in culinary tourism*. Retrieved from https://sector.tov.be/wp-content/uploads/2018/11/GlobalData_Keytrendsinculinarytourism_130918.pdf
- Damanik, J., & Weber, H. F. (2006). *Perencanaan ekowisata: Dari teori ke aplikasi*. Yogyakarta: Puspar UGM & Andi Offset.
- Dimyati, V. (2019). *Ubud ditetapkan jadi destinasi wisata gastronomi standar dunia*. Retrieved from https://www.inews.id/travel/destinasi/ubud-ditetapkan-jadi-destinasi-wisata-gastronomi-standar-dunia/566525
- Elbert, C. (2011). *Gastronomy and cultural identity in a pluralistic society*. Retrieved from http://faith andheritage. com/2011/01/gastronomy-and-cultural-identity-in-a-pluralistic-society/
- Gillesoie, C., & Cousin, J., A. (2001). *European gastronomy into the 21st century*. Retrieved from http://id.wiki-pedia.org/wiki/Gastronomi
- Goris, R. (1954). Prasasti Bali I dan II. Bandung: Masa Baru.
- Ketaren, I. (2019). *Pemahaman terhadap gastronomi*. Retrieved from https://groups.google.com/d/msgid/ gastronomi-indonesia/1ca16415-8632-4e86-87f8-17fe35ee0462%40googlegroups.com.
- Kholisdinuka, A. (2019). Ubud Bali siap jadi destinasi gastronomi berstandar global. *Detik.com.* Retrieved from https://travel.detik.com/travel-news/d-4583915/ubud-bali-siap-jadi-destinasi-gastronomi-ber standar-global
- Mahendra, A. (2019). Ubud may be named global 'gastronomy destination. *The Jakarta Post*. Retrieved from https://www.thejakartapost.com/life/2019/06/13/ubud-may-be-named-global-gastronomy-de stination.html
- Nikson. (2019). Ubud segera ditetapkan sebagai destinasi gastronomi dunia. *Balipost.com.* Retrieved from http://www.balipost.com/news/2019/06/11/77454/Ubud-Segera-Ditetapkan-sebagai-Destinasi...ht ml
- Putra, I. N. D., Raka, A. A. G., Yanthy, P. S., Aryanti, N. N. S., & Pitanatri, P. D. S. (2018). *Wisata gastronomi Ubud Gianyar*. Denpasar: Cakra Media Utama.
- Savarin, J. A. B. (2009). *The physiology of taste or meditations on transcendental gastronomy* (Translated by M. F. K. Fisher). Retrieved from http://books.google.co.id/books?id=djEEAAAAYAAJ&pri ntsec=frontcover&dq= gastronomy&hl=id&sa=X&ei=6FLU8DQGeT40gHbqoDAAw&redir_esc=y#v=onepage&q=gastronomy&f =false
- White, K. D. (1970). Roman farming. Ithaca, NY: Cornell University Press.

ANALYSIS THE IMPACT OF CAPITAL STRUCTURE AND PROFITABILITY ON DIVIDEND POLICY: CASE STUDY OF MANUFACTURING FIRM IN INDONESIA

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ABSTRACT

This research was done to test the impact of capital structure and profitability on dividend policy. This research examines manufacturing firms listed in IDX (Indonesia Stock Exchange) period 2011–2014. The companies studied are 120 manufacturing firms. The main source of research data is from Indonesia Capital Market Directory (ICMD). Sampling in this study takes purposive sampling method. The analysis system uses multiple linear regression and panel data. The results of research on the effect of capital structure to dividend policy indicates that Book Debt to Asset Ratio and Long Term Debt to Equity Ratio have a negative effect on dividend policy. Book Debt to Equity Ratio has a positive impact on dividend policy. The results of research on the effect of profitability to dividend policy indicates that Return on Asset, Return on Equity, and Net Profit Margin do not have a positive impact on dividend policy. The findings of this study are that the capital structure influences dividend policy, but profitability does not influence dividend policy.

Keywords: Capital structure, debt, dividend, equity, profitability.

INTRODUCTION

Competition in the increasing stringent business world makes companies, especially manufacturing companies, try to rise the value and performance of the firm. To increase the value and performance of the firm, it can be done through increasing the prosperity of ownership or shareholders. In choosing an alternative funding to finance, the activities of the firm to be considered is how the firm can create a favorable combination between the uses of funding sources. The source of corporate funding comes from internal sources and external sources. Internal sources of the firm are self-generated funds within the firm while external sources are funds from creditor and owner or shareholder.

The capital structure has an impact on the dividend policy because the capital structure reflects the ability of the company to fulfill all debt obligations indicated by what part of its own capital taken to pay the debt. Debt is one of the funding source which will cause the company to bear the fixed burden of interest and debt installment. The proportion of debt that is getting bigger on the capital structure shows a big burden on the company to pay interest and principal installments (Huda, 2013; Sulistyowati, Suhadak, & Husaini, 2014).

Profitability affects dividend policy because profitability is a firm's ability to make profit so that dividend will be divided if the firm earns profit. The earnings after-tax are partially distributed as dividends to shareholders and others held in the retained earnings. Dividends received by shareholder's increase, the shareholder's prosperity will increase. Therefore, the company's goal to prosper shareholders can be achieved. One of the firm's goals is to prosper the owner of the company (shareholder) very closely related to the firm's ability to earn profit (Wati, 2015).

The dividend policy is a part of the firm's funding decisions. The dividend policy shows a decision about whether the profits earned by the firm will be given dividends to shareholders or will be withheld to raise capital for future investment financing. Dividends distributed to shareholders are highly dependent on the results of the agreement of participants in the common meeting of shareholders. If the retained earnings mean that the profits are reinvested for use in supporting the business activities of the company.

The company tries to seek an optimal dividend policy. Brigham and Houston (2016) state that the optimal dividend policy shows a dividend policy which can create a balance between corporate growth and dividends. When management decides how much profit to share with shareholders, they should always keep in mind that one of the company's goals is to maximize shareholder wealth. Shareholder prosperity can be achieved if shareholders earn dividends. Dividends paid depend on the policies of each firm. Thus they require a more serious consideration from the firm management. The dividend policy is fundamentally used to determine how much profit is shared with the shareholders as dividend, and which will be retained as retained earnings. However, dividend policies in some com-

panies have not been able to support the achievement of corporate goals to maximize shareholder's wealth (Darminto, 2008). In consideration of making a dividend policy, study into the effect of capital structure and profitability on dividends needs to be done. Study in several countries shows that the capital structure and profitability influence dividend policy. In Indonesia, the results of study on the effect of capital structure and profitability on dividend policy show different results. Some of the results of the study show that the capital structure and profitability have an impact but some others have no impact on dividend policy. Based on the description of the background of the problem above, the problems in this study can be formulated as follows: 1) Do the variables in capital structure have an impact on the dividend policy on manufacturing firms listed on IDX? 2) Do the variables in profitability have an impact on dividend policy on manufacturing firms listed on IDX?

Capital structure variable can be measured by Book Debt to Asset Ratio (DAR), Long-term Debt to Equity Ratio (LDER) and Book Debt to Equity Ratio (DER) and profitability variable can be measured by Return on Assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM) (Van Horne & Wachowicz, 2009). Based on the problems which have been formulated, this study aims to: 1) Know the impact of variables in capital structure: DAR, LDER and DER on dividend policy in manufacturing companies listed on IDX. 2) Know the impact of variables in profitability: ROA, ROE and NPM on dividend policy in manufacturing companies listed on IDX.

LITERATURE THEORY AND HYPOTHESES

Capital Structure

The capital structure is a proportion or combination of debt, preferred stock, and equity common stock (Brigham & Houston, 2016; Ross, Westerfield, Jaffe, & Jordan, 2016). Measurement of capital structure can be done through the calculation of corporate leverage level, which illustrates how much debt-financed company assets. The optimal capital structure shows a capital structure that maximizes the price of equity common stock, and usually the debt ratio is lower than the ratio that maximizes the expected earnings per share (EPS) (Brigham & Houston, 2016).

Capital structure shows the determination of the composition of capital, the comparison between debt and capital itself. In other words, the capital structure is result of financing decisions which essentially decide whether they use debt or equity to fund the company's operations (Syamsuddin, 2009). Leverage is the use of external sources of funds by the firm and the consequence that the firm must bear the fixed burden of interest and debt repayments. The leverage ratios consist of:

$$\begin{aligned} \text{DAR} &= \frac{\text{Debt}}{\text{Total Assets}} \text{ (Syamsuddin, 2009)} \\ \text{LDER} &= \frac{\text{Total long-term Debt}}{\text{Shareholdrs'} Equity} \text{ (van Horne & Wachowicz, 2009)} \\ \text{DER} &= \frac{\text{Debt}}{\text{Shareholders'} Equity} \text{ (Syamsuddin, 2009)} \end{aligned}$$

Profitability

Profitability is the firm's ability to create a profit. Shareholders in the company want to rate returns, which consist of results and capital gains (Brigham & Houston, 2016). The higher the firm's ability to generate profits, the higher the rate of return for received shareholders, and the higher the value of the firm. It can also be said that profitability is the firm's ability to generate net income from business activities in the accounting period.

According to Van Horne and Wachowicz (2009) if there is an excess of funds derived from operating profit after being used to fund all investment opportunities, the surplus will be shared to shareholders as investors in cash dividends. Sutrisno (2017) states that the company sets a dividend payout ratio target based on its profit target. If the profit target is achieved and has stabilized, then the company will adjust the amount of dividend to be paid to reach the target set. Profitability ratio is the ratio to quantify the ability of the firm and seek earning. The ratio also quantifies of the effectiveness of a firm's management level. Profitability ratios consist of (Husnan & Pudjiastuti, 2018):

$$ROA = \frac{Earning after Tax}{Total Assets} \times 100\%$$

$$ROE = \frac{Net profit after tax}{Shareholders' Equity} \times 100\%$$

$$NPM = \frac{Earning after tax}{Net Sales} \times 100\%$$

Dividend Policy

Dividend policy is something that cannot be separated from the company's funding decisions. The dividend policy shows a decision on whether the profits earned by the firm will be shared to shareholders as dividends or to be retained as retained earnings for future business development decisions (Sartono, 2016). Dividend policy is a concern for 2 (two) important reasons: 1) Payment of dividends can affect the stock price, and 2) Retained earnings are generally the main and most important source of additional capital for the company's growth.

These two reasons are two sides of the company's interests that must be taken seriously. By considering this, company management must make careful decisions in making dividend policies to be chosen. The dividend policy needs to be analyzed and decided more wisely, because if dividends are distributed to shareholders, this will reduce the amount of internal funds that will be used to expand the firm's operations (Ross *et al.*, 2016).

Signaling Theory

The company manager is obliged to give a signal about the condition of the company to shareholders. Giving these signals is as a matter of responsibility to them. The signal theory explains that companies have incentives to provide financial information to shareholders. The company's encouragement to give information is due to symmetrical information between insiders and outsiders because the company knows more about the company and its future conditions or prospects than outsiders (especially investors and creditors) (Weston & Copeland, 2010).

The announcement of dividends as a mean to send a real signal to external firms and markets about the work of the firm in the present and future is an appropriate but expensive way. After receiving the signal through the announcement of the dividend then the market will react to the announcement of the dividend change paid so that it can be said the market captures information about the prospect of the company contained in the announcement. The better the condition and performance of the company will produce a positive signal for investors and creditors (Ross *et al.*, 2016).

Theory Debt Covenant Hypothesis

Theory Debt Covenant Hypothesis argues that the level of the desired loan size of the firm is greater, the firm must strive to show good performance to the debtholders. It is intended that debtholders believe the security of the funds is guaranteed, and confident that the company can repay the loan with interest. Therefore, the company tends to be not conservative when it seeks to raise large funds from debtholders (Ross *et al.*, 2016).

Loans made by the company will greatly affect the profits owned by the company. Meanwhile, profit owned by the company is very influential on dividends. Thus, loans or debts incurred by the firm will affect shareholder dividends. The effect of leverage on dividends can also be explained by the thought of a debt covenant hypothesis (Kalay, 1982) which discloses firms using high leverage will cause the company to reduce or not increase its dividend payout.

Agency Theory

Jensen and Meckling (1976) state that the creditor is principal and the management of the firm is agent. The principal gives decision-making authority to the agent. When a shareholder appoints managers or agents as managers and decision makers for the company, then the agency relationship emerges. The agency theory from Jensen and Meckling (1976) refers to the fulfillment of the main objectives of financial management that is to maximize shareholders' wealth. The inability or unwillingness of management to increase shareholder wealth leads to so-called agency problems.

According to Jensen and Meckling (1976), agency problems happen if people force to trigger conflict and selfishness when some interests meet in a joint activity. Motivated principals enter into contracts to endow themselves with ever-increasing profitability, while agents are motivated to maximize their economic and psychological needs. Agency costs are costs related to supervision to ensure that management responds consistently in accordance with company contractual agreements between creditors and companies that represent shareholders. Agency costs can increase if the difference in interests between shareholders, managers and creditors increases as well. Increased disclosure will reduce agency costs and information gaps (Marston, 2003).

Agency problems between company managers as agent and shareholders can be avoided or minimized by dividend policy (Jensen and Meckling, 1976). The more dividends a company wants to pay, the more likely it is to reduce the retained earnings. Dividend payments also play a role in the monitoring mechanism because it makes managers have to provide funds that may be obtained from outside the company which will certainly be able to reduce agency costs.

The Impact of Capital Structure to Dividend Policy

Citing research from (Sulistyowati *et al.*, 2014) and Al-Najjar (2011) constructed on agency theory (Jensen & Meckling, 1976), DAR has a significant effect on the positive direction towards the DPR. When the DAR increases, the DPR will increase, when the DAR decreases, the DPR will also decrease and based on the thought of covenant hypothesis (Kalay, 1982) when DAR increases, the DPR decreases, DAR decreases then the DPR will increase. The results of the study (Sulistyowati *et al.*, 2014) that DAR negatively affect the DPR.

By using agency theory as stated by Jensen and Meckling (1976), Sulistyowati *et al.* (2014) show that LDER has a significant effect on the positive direction towards the DPR. When the LDER increases, the DPR will increase, when the LDER decreases, the House will also decrease and based on the thought of covenant hypothesis (Kalay, 1982) when LDER increases, the DPR decreases, LDER decreases then the House will increase. The consequence of the study (Sulistyowati *et al.*, 2014) that the LDER negatively impact on the DPR.

By using agency theory (Jensen & Meckling, 1976), Sulistyowati *et al.* (2014) also show that DER has significant influence with positive direction toward DPR. When DER increases, the DPR will increase, when DER decreases so the House will also decrease and based on the thought of covenant hypothesis (Kalay, 1982) when DER increases, DPR decreases, DER decreases then DPR will increase. The consequence of the study (Sulistyowati *et al.*, 2014) that the DER has a positive impact on the DPR.

The Impact of Profitability to Dividend Policy

The signal theory presented by Miller and Mondigliani states that dividend increase gives a signal to investors that firm has good income and good performance in the future. Based on the theory, it can be shown that high income through assets owned as reflected by the value of return on assets has a positive impact on profit policy given to shareholders as dividend. This is due to the increased ability of companies to get profits. Therefore, the value of the company will certainly increase and provide a good signal to investors. The signal is that the firm is able to get profits. The theory is in line with the study of Yudhanto and Aisjah (2013) about influence Return on Assets, Net Profit Margin, Return on Equity, Earning per Share (EPS) on Dividend Policy and Wati (2015) about impact of Debt to Equity Ratio, Return on Asset, Collateral Asset, and Asset Growth on Dividend Policy.

ROE as one of the profitability ratios is a very important indicator for investors to help investors in measuring and knowing the company's ability in obtaining net profit related to dividend distribution. Dividend policy taken by the company is certainly inseparable from the valuation of earning on equity. Earnings on equity are usually measured by return on equity. Companies with high return equity have the ability to share high dividends. Therefore, a rise in the company's return on equity is expected to attract investor interest. Based on the above explanation, it can be indicated that ROE is in line with signaling theory proposed by Miller and Mondigliani, that the higher the profit, the higher the welfare of shareholders through high distributed dividends. The theory is in line with research of Yudhanto and Aisjah (2013).

NPM is a measure of the percentage of each sale value that results in a net profit or profit rate. Based on signaling theory which states that the level of profits obtained by the company increases, it shows that the performance of management in managing the company is increasing as well. Assessment of a firm's achievements can be seen from the firm's capability to get profits. The high level of profitability becomes the determinant of corporate value. Corporate value is very important because high corporate value will cause high shareholder wealth (Brigham & Houston, 2016). The theory is in line with the study results of Yudhanto and Aisjah (2013).

Hypothesis Formulation

Based on several reviews and results of the study described above, this first study hypothesis can be written as follows.

 H_1 : The impact of capital structure on dividend policy:

 H_{la} : Book Debt to Asset Ratio (DAR) has a negative impact on dividend policy (DPR).

 H_{lb} : Long Term Debt to Equity Ratio (LDER) has a negative impact on dividend policy (DPR)

 H_{lc} : Book Debt to Equity Ratio (DER) has a positive impact on dividend policy (DPR).

 H_2 : The impact of profitability on dividend policy:

 H_{2a} : Return On Asset (ROA) has a positive impact on dividend policy (DPR). H_{2b} : Return On Equity (ROE) has a positive impact on dividend policy (DPR). H_{2c} : Net Profit Margin (NPM) has a positive impact on dividend policy (DPR).

Hypothesis Framework

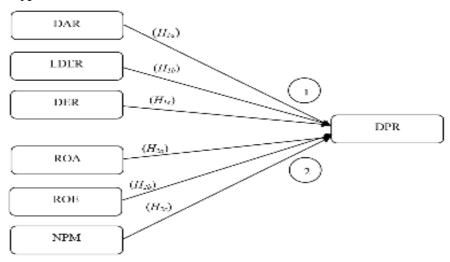


Figure 1. Hypothesis framework

RESEARCH METHOD

The type of research conducted in this paper is explanatory research which is a study that aims to analyze the relationships among variables or how variables has effects on other variable (Umar, 2007). The population observed in this study are all manufacturing firms listed in IDX period 2011–2014. By using the purposive sampling method, the selected manufacturing firms are 120 companies. By using the sampling method, the sample criteria obtained are expected to be truly in accordance with the research that will be conducted. The sample in this research covers three sectors of manufacturing company: 1) Basic Industrial & Chemical Sector, 2) Various Industries Sector, and 3) Consumer Goods Industry Sector.

This study uses data regression panel and secondary data. Data regression panel is a composite data between time series and cross section. Secondary data is data collected by researchers from existing sources. In this study, the data analysis used is quantitative method to analyze the relationship among variables based on financial and economic theories, supported by statistical and econometric analysis, and then processed by computer using Stastistical Product and Service Solutions (SPSS) program to obtain the result of this analysis. This study uses multiple linear regression analysis with least squares method. This analysis is used to estimate the parameters of the regression model used to examine the effect of several independent variables, named: capital structure variables (DAR, LDER, and DER) and profitability variables (NPM, ROA and ROE) on the dependent variable of dividend policy (DPR). Tests conducted in this research are: descriptive statistical analysis, and classical assumption test consisting of: 1) Multicolinearity test, 2). Heteroscedasticity test, and 3) Test of Normality, and multiple regression test (Algifari, 2015; Ghozali, 2013).

The above hypotheses are tested using two linear multiple regression models. The first hypothesis is tested with the first regression model and the second hypothesis is tested with the second regression model. The first model regression equation is formulated as follows.

 $DPR_{i,t} = \alpha_0 - \alpha_1 DAR_{i,t} - \alpha_2 LDER_{i,t} + \alpha_3 DER_{i,t} + e_{i,t}$

The second model regression equation is formulated as follows.

 $DPR_{i,t} = \alpha_0 + \alpha_1 ROA_{i,t} + \alpha_2 ROE_{i,t} - \alpha_3 NPM_{i,t+} e_{i,t}$

FINDINGS

Descriptive Statistics Analysis

Result of descriptive statistics analysis of model I as follows. N shows the amount of data observed. The amount of data observed in DAR, LDER, DER and DPR is 455, 449, 455 and 440. DAR has minimum value 0.008; maximum value 1.162; average value (mean) 0.460; and standard deviation (Std. Dev.) of 0.204. LDER has a minimum value of 0.002; maximum value 5.037; average value (mean) 0.357; and a standard deviation of 0.592. DER has a minimum value of 0.009; maximum value 11,254; average value (mean) 1,231; and the standard deviation (Std. Dev.) of 1.389. DPR has a minimum value of 0.001; maximum value 2,194; average value (mean) 0.380; and standard deviation (Std. Dev.) of 0.323. The descriptive statistics data in model I can also be shown in Table 1. The descriptive data in model II can also be shown in the Table 2.

Table 1 Summary of Descriptive Statistics in Model I

Variable	N	Minimum	Maximum	Mean	Std. Dev.
DAR	455	0.008	1.162	0.460	0.204
LDER	449	0.002	5.037	0.357	0.592
DER	455	0.009	11.254	1.231	1.389
DPR	440	0.001	2.194	0.380	0.323

Notes: N = the amount of data observed, DAR = Book Debt to Asset Ratio, LDER = Long Term Debt to Equity Ratio, DER= Book Debt to Equity Ratio, DPR= Dividend Payout Ratio and Std. Dev. = standard deviation.

The results of statistical analysis of descriptive model II as follows: ROA has a minimum value of -0.083; maximum value of 0.456; average value (mean) 0.070; and a standard deviation of 0.087. ROE has a minimum value of -0.174; maximum value 1,238; average value (mean) 0.112; and a standard deviation of 0.160. NPM has a minimum value of -0.623; maximum value 31,871; average value (mean) 0.323; and standard deviation 2,930. DPR has a minimum value of 0.024; maximum value 1.830; average value (mean) 0.368; and a standard deviation of 0.298. Table 2 shows Summary of Descriptive Statistics in Model II

Table 2 Summary of Descriptive Statistics in Model II

Variable	N	Minimum	Maximum	Mean	Std. Dev.
ROA	118	-0.083	0.456	0.070	0.087
ROE	120	-0.174	1.238	0.112	0.160
NPM	118	-0.623	3.871	0.323	2.930
DPR	110	0.024	1.830	0.368	0.298

Notes: N = the amount of data observed, ROA = Return on Assets, ROE = Return on Equity, NPM = Net Profit Margin, DPR = Dividend Payout Ratio and Std. Dev. = standard deviation.

The result of multicolinearity test of model I and II shows that there is no multicolinearity among independent variables in the multiple regression model. The result of heteroscedasity test of model I and II using glesjer test shows that the level of significance of the independent variables is all greater than 0.05. By using of these results, it can be stated that there is no variance inequality so there is no problem of heteroscedasticity in regression model. Based on Central Limit Theorem (Cooper & Emory, 1995) that the sampling distribution curve for sample size 30 or more has a normal distribution.

Summary of regression coefficients, t test, R adjusted test, and F test are stated in Table 3. Using Table 3, Model I can be made the following regression equation: $DPR_{i,t} = 0.580 - 0.778 \ DAR_{i,t} - 0.148 \ LDER_{i,t} + 0.183 \ DER_{i,t} + e_{i,t}$. The equation can be interpreted and explained as follows:

- a) The constant of a positive value of 0.580 suggests that the DPR tends to increase by assuming DAR, LDER and DER remain.
- b) The negative DAR regression coefficient states that the decrease of DAR by one unit will increase the DPR by 0.778 with the judgement that the other independent variables do not change.
- c) The negative value LDER regression coefficient states that the decrease of LDER by one unit increases the DPR by 0.148 with the judgement that the other independent variables do not change.

d) The positive DER regression coefficient states that the increase of DER by one unit will increase the DPR of 0.183 with the judgement that the other independent variables do not change.

It can be concluded that DAR and LDER have negative influence on DPR, while DER has positive effect to DPR.

In the Table 3, Model II the regression equation is obtained like this: $DPR_{i,t} = 0.283 + 0.661 ROA_{i,t} + 0.131 ROE_{i,t} - 0.058 NPM_{i,t} + e_{i,t}$

The equation can be interpreted and explained as follows:

- a) The constant of a positive value of 0.283 states that the DPR tends to increase by assuming ROA, ROE and NPM remain.
- b) The positive ROA regression coefficient states that the increase of ROA by one unit will increase the DPR of 0.661 with the assumption that the other independent variables do not change.
- c) The positive ROE regression coefficient states that the increase of ROE by one unit will increase the House by 0.131 with the assumption that the other independent variables do not change.
- d) Negative NPM regression coefficient states that the decrease of NPM by one unit will increase the DPR by 0,058 assuming other independent variables do not change.

It can be stated that Return on Assets (ROA) and Return on Equity (ROE) have a positive impact on Dividend Payout Ratio (DPR), while NPM has a negative impact on Dividend Payout Ratio (DPR).

Coefficient Determination Test Results

Based on the Table 3 below, model I known DAR, LDER, and DER influenced by 6.7% against the DPR. Based on the above table model II known ROA, ROE, and NPM have an effect of 2.1% on DPR.

Table 3 Multiple Regression Tests

Variables	Coeff. of Reg.	$t_{statistic}$	<i>p-v</i> alue	Adj R ²	F_{test}	Prob F _{test}
Model 1						
C	0.580	8.545	0.000			
DAR	-0.778	-3.099	0.002	0.067	4.776	0.003
LDER	-0.148	-1.584	0.115			
DER	0.183	2.788	0.006			
Model II	0.283					
C	0.283	5.017	0.000			
ROA		0.536	0.594	0.021	1.512	0.219
ROE	0.131	0.289	0.774			
NPM	-0.058	-0.064	0.949			

Notes: C = Constan, DAR = Book Debt to Assets Ratio, LDER = Long tTerm Debt to Equity Ratio, DER = Book Debt to Equity Ratio, ROA = Return on Assets, ROE = Return on Equity, and NPM = Net Profit Margin.

DISCUSSION

In above Table 3, result of F_{test} for model I got the calculated value of F equal to 4,776 with probability equal to 0,003. Since the probability is much less than 0.05. Therefore, the regression model can be used to estimate the DPR. This means that the DAR, LDER, and DER variables simultaneously affect the DPR. Result of F_{test} for model II got calculated value of F equal to 1,512 and F_{table} equal to 2,68 and probability value 0,219. So F table > $F_{calculated}$ can be concluded that ROA, ROE, and NPM variables together do not have an effect on to DPR.

As seen in the Table 3, t_{test} with using a 5% alpha level, the DAR variable is significant because it has a value smaller than the significance level or 0.002< 0.05. Thus, the hypothesis H_{la} which states that DAR has a negative impact on the DPR is supported. Using a 5% alpha level, the LDER variable is not significant because it has a value greater than the significance level or 0.115> 0.05. Hence, the hypothesis H_{lb} which states that LDER has a negative effect on the DPR is not supported. Using a 5% alpha level, the DER variable is significant because it has a value smaller than the significance level or 0.006 <0.05. Referring to the t_{test} , the coefficient on the regression equation of Model 1 can be interpreted as follows. The regression coefficients on the DAR and DER variables can be used to predict DPR variable, but the regression coefficient on the avariable LDR cannot be used to estimate DPR variable. Hence, the hypothesis H_{lc} which states that DER has a positive effect on the DPR is supported. In all three hypotheses, the supported hypothesis is more than the unsupported one. Therefore, capital structure has impact on dividend policy and the results of this study are in accordance with the results of study conducted by Jensen and Meckling (1976), Kalay (1982), Gayathridevi, and Malikarjunappa (2012), and Sulistyowati *et al.* (2014).

As seen in the table above, t_{test} with using a 5% alpha level, the ROA variable is not significant because it has a value greater than the significance level or 0.594> 0.05. Thus, the hypothesis H_{2a} which states that ROA has a positive impact on the DPR is not supported. Using a 5% alpha level, the ROE variable is not significant because it has a value greater than the significance level or 0.774> 0.05. Thus, the hypothesis H_{2b} which states that ROE has a positive impact on the DPR is not supported. Using a 5% alpha level, the NPM variable is not significant because it has a value greater than the significance level or 0.949> 0.05. Thus, the hypothesis H_{2c} which states that NPM has a positive effect on the DPR is not supported. Referring to the t_{test} , all of the regression coefficients in the regression equation of Model II cannot be used to predict the DPR variable. Therefore, the results of the study are not in line with the results of research done by Yudhanto and Aisjah (2013), Wati (2015), and Tarieq (2015). However, the results of this study are in accordance with the results of research done by Purnama and Sulasmiyati (2017) that the profitability has not a positive effect on the DPR. The findings of this study are that the capital structure influences dividend policy, but profitability does not influence dividend policy

Hypotheses 2 (H_2) is not supported. It is possible because the earning is measured by earning after tax. Earning measured by earning after tax has the following weaknesses. First, depreciation is expense that is not paid by cash and the allocation of depreciation expense is influenced by company policy. If the company wants to pay lower taxes in the early periods, the company allocates greater depreciation expenses in the period to ensure its earning is lower. Lower earning makes lower paid taxes. Second, the corporation tax rate is determined by the government. Therefore, earning after tax is less reflective of the performance achieved by the company. To minimize the weaknesses in the measurement of the earning, the earning should be measured by earnings before interest, taxes and depreciation. Some researchers use earnings before interest, taxes and depreciation to measure earning, and their research results are better (Alti, 2006; Weigl, 2011).

CONCLUSION

This research examines manufacturing firm listed in IDX period 2011-2014. The companies studied are manufacturing firms listed on the Indonesia Stock Exchange and as many as 120 companies. This study tests the impact of capital structure on dividend policy hypothesized that DAR has a negative influence on DPR, Long Term Debt to Equity Ratio (LDER) has a negative influence on dividend policy (DPR), and Book Debt to Equity Ratio (DER) has a positive dividend policy (DPR). The results of the statistical analysis of this study that DAR is supported significantly has a negative impact on the DPR, the Long Term Debt to Equity Ratio (LDER) is not supported to influence the DPR, and Book Debt to Equity Ratio (DER) is supported significantly has a positive impact on dividend policy (DPR). In all three hypotheses, the supported hypothesis is more than the unsupported one. Therefore, in manufacturing firms, capital structure has effect on dividend policy.

This study also tests the effect of profitability on dividend policy hypothesized that Return on Asset (ROA) has a positive effect on dividend policy (DPR), Return on Equity (ROE) has a positive effect on dividend policy (DPR), and Net Profit Margin (NPM) has a positive impact on dividend policy (DPR). The results of the statistical analysis of this study that ROA, ROE and NPM have a positive impact on the DPR is not supported. Therefore, in manufacturing firms, profitability does not have impact on dividend policy.

Limitations of this research are follows. The first, factors affecting dividend policy are numerous, but this study only analyzes the effect of capital structure and profitability. The second, in this study the financial statements of manufacturing firms listed on IDX used only the period 2011–2014. The third, or the last, based on *F-test*, jointly ROA, ROE, and NPM have no effect on dividend policy, so for further research it is expected to retest and add data period. This study, earning is measured by earning after tax. Since earning after tax has weaknesses, subsequent research suggests that earning is measured by earnings before interest, taxes, and depreciation or earning is measured by cash-based profit. Earning after tax is accounting profit that is strongly influenced by the accounting calculation method used in that period.

Based on the conclusions and limitations of the research that has been presented then it can be given the suggestions as follows. For the company, it is expected that the company in taking decision on the dividend policy is more considered by looking at the condition and the state of the company. For investors, it is expected that investors can consider the decision to invest by looking at the performance of companies, especially in firms that are able to give dividends, because firms that are able to pay dividends have better prospects for the future. For other parties, it is expected that further research can be developed again by adding factors that affect dividend policy and increase the number of samples with long periods.

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REFERENCES

- Al-Najjar, B. (2011). Inter-relationshop between capital structure and dividend policy: Empirical from Jordanian data. *International Review of Applied Economics*, 25(2), 209–224.
- Alti, A. (2006). How persistent is the impact of market timing on capital structure? *The Journal of Finance*, *LXI*(4), 1681–1710.
- Algifari. (2015). Analisis regresi: Teori, kasus dan solusi. 3th Edition. Yogyakarta: BPFE UGM.
- Brigham, E. F., & Houston, J. F. (2016). *Fundamental of financial management*. 14th Edition. Boston, MA: Cancage Learning.
- Darminto. (2008). Pengaruh profitabilitas, likuiditas, struktur modal dan struktur kepemilikan saham terhadap kebijakan dividen. *Jurnal Ilmu-Ilmu Sosial*, 20(2), 87–97.
- Cooper, D. R., & Emory, W. (1995). Business research method. 5th Edition. Chicago, IL: Irwin Inc.
- Gayathridevi, A., & Malikarjunappa, T. (2012). Dividend policy of Indian textile companies An empirical study. *The Journal Contemporary Management Research*, *6*(2), 14–22.
- Ghozali, I. (2013). Aplikasi Analisis Multivariate dengan Program SPSS. Edisi Ketujuh. Semarang: BP UNDIP.
- Huda, M. (2013). Analisis pengaruh struktur modal tehadap kebijakan dividen pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia (BEI). Skripsi. Program Sl Jurusan Manajemen Keuangan Fakultas Ekonomi dan Ilmu Sosial Universitas Islam Negeri Sultan Syarif Kasim Riau Pekanbaru.
- Husnan, S., & Pudjiastuti, E. (2018). *Dasar-dasar manajemen keuangan*. 7th Edition. Yogyakarta: UPP AMP YKPN.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial, behavior, agency, and ownership structure. *Journal of Financial Economic*, *3*(4), 305–360.
- Kalay, A. (1982). Stockholder-bondholder conflict and dividend constraint. *Journal of Financial Economics*, 10(2), 211–233.
- Purnama, A. R. N., & Sulasmiyati, S. (2017). Analisis pengaruh profitabilitas, likuiditas terhadap kebijakan dividen kas. *Jurnal Administrasi Bisnis* (JAB), *51*(2), 201–206.
- Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2016). *Corporate finance*. 11th Edition. New York, NY: McGraw-Hill International Edition.
- Sartono, A. (2016). Manajemen keuangan: Teori dan aplikasi. 4th Edition. Yogyakarta: BPFE UGM.
- Sulistyowati, A., Suhadak, & Husaini, A. (2014). Pengaruh struktur modal terhadap kebijakan dividen (Studi pada perusahaan yang terdaftar di Bursa Efek Indonesia periode tahun 2010–2012). *Jurnal Administrasi Bisnis*, 8(2), 1–10.
- Sutrisno. (2017). Manajemen keuangan: Teori, konsep dan aplikasi. Revised Edition. Yogyakarta: Ekonisia.
- Syamsuddin, L. (2009). *Manajemen keuangan perusahaan: Konsep aplikasi dalam perencanaan, pengawasan, pengambilan keputusan.* Jakarta: Rajawali Pers.
- Tarieq, A. (2015). The joint-determinants of leverage and dividen plocy: A balanced panel study of non financial firms of India and Pakistan, *11*(10), 1857–7811.
- Umar, H. (2007). Metodologi penelitian untuk skripsi dan tesis. Jakarta: PT Grafindo Persada.
- van Horne, J. C., & Wachowicz, Jr., J. M. (2009). *Fundamentals of financial management*. 13th Edition. Essex, England: Pearson Education Limited.
- Wati, T. A. P. (2015). Pengaruh return on asset, debt to equity ratio, collateral asset, dan pertumbuhan aset terhadap kebijakan dividen (Studi pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2011–2013). Skripsi. Program Studi Manajemen Jurusan Manajemen Fakultas Ekonomi Universitas Negeri Yogyakarta.
- Weigl, J. (2011). *Market-timing of capital structure and factors influencing the leverage decision of firms*. Inaugural-Dissertation. Fakultät für Wirtschaftswissenschaften an der Technischen Universität Chemnitz.
- Weston, J. F., & Copeland, T. E. (2010). Manajemen keuangan. Jilid 2. Jakarta: Bina Rupa Aksara.
- Wilkinson, J. (2013). Supplier power (one of the Porter's five forces). https://strategiccfo.com/ supplier-power-one-of-porters-five-forces/.
- Yudhanto, S., & Aisjah, S. (2013). Pengaruh net profit margin, return on asset, return on equity, earning per share terhadap kebijakan dividen. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, 1(2).

FINANCING OF WORKING CAPITAL REQUIREMENTS AND PROFITABILITY OF THE INDONESIAN COMPANIES IN BASIC INDUSTRY AND CHEMICALS SECTOR

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ABSTRACT

Taking short-term financing decisions is a task that must be carried out effectively by the company manager. However, research in Indonesia still rarely has topics related to financing of working capital requirements. This study examines the effect of working capital financing on the profitability of Indonesian companies in the latest data in the basic industry and chemicals sector. The results show the inverse U-shape relationship between short-term financial debt used to fund working capital requirements and the profitability of the firm. Analysis is carried out by applying panel data testing procedures. Findings can be considered so that managers should not only pay attention to the investment side, but also in working capital funding.

Keywords: Working capital financing, profitability.

INTRODUCTION

The company's working capital refers to a net investment in short-term assets. These short-term assets are continuously moving into and out of the company and are important for daily activities (Atrill, 2014). The need for working capital certainly needs to get short-term financing from the company. Related to this, Miswanto (2012) has discussed policies for financing corporate working capital. He explained that in the relationship between short-term versus long-term funding, it was concluded that different policies would have different risks and benefits.

In recent years, working capital management obtains increasing concern from companies and also other parties related to the capital market, especially in funding activities for working capital needs. In CNN Indonesia's online business news (2017), Otoritas Jasa Keuangan (OJK) revealed that during the period January-March 2017, as many as 23 listed companies received funds in the capital market as much as Rp33.2 trillion, which increased by 40.1 percent compared to the same period in 2016. On this CNN news, OJK explained that different from the previous year, in 2017 it was planned that 24 percent of the funds would be used for business expansion and 69 percent for working capital.

Meanwhile, the knowledge of the author until the present time, research in Indonesia still has not yet examined the topic of working capital financing in relation to the financial performance of the company. This research fills the gap. Not long ago, Mulyono, Djumahir, and Ratnawati (2018) and Rustandi, Supriatna, Nugraha, and Supiyadi (2018) examined the impact of working capital management on the profitability in Indonesian companies. However, the attention of those two studies is more about each component of working capital investment, which is not about fund working capital needs. As Baños-Caballero, García-Teruel, and Martínez-Solano (2016), investment in working capital requirements should not be the only thing that is important in a company's short-term decision, but also on how these investments are funded should be considered.

The objective of this research is to investigate the effect of working capital financing on the profitability of Indonesian public corporations in the basic industry and chemicals sector for the 2016–2018 period. In the meantime, Filbeck and Krueger (2005) have shown that there are prominent differences in the practice of working capital among different industries. Therefore, the focus of this research on a particular sector is in accordance with the understanding that working capital is an industry-specific issue. Interestingly, the following two research correspond to the topic of working capital funding convey the opposite results. Dinçergök (2018) found concave-shaped relations for a sample of companies from Borsa Istanbul in the chemical related sectors. On the contrary, Panda and Nanda (2018) show convex relationships in the chemical sector of Indian firms.

LITERATURE REVIEW AND HYPOTHESIS

In corporate financial management textbooks, working capital is often defined as short-term assets reduced by short-term liabilities (Atrill, 2014). The main components in short-term assets are inventories, accounts receivable, and cash in hand and at the bank. While important components of the short-term liabilities are accounts payable and

bank loans. Darun, Roudaki, and Radford (2015) discuss the evolution of dynamic working capital management research as a change in managerial focus in reflecting on how companies manage working capital. Following the description of Darun *et al.* (2015), the current research period (1990–2000s) is showing two developing themes, namely effectiveness in working capital management and understanding its practice. In this case, one important concern of the effectiveness of working capital management is the profitability of the company.

A number of previous studies have examined the effect of working capital management on company profitability. Many studies use the cash conversion cycle (CCC) as a popular measure of working capital management in relation to the company profitability. Using Swedish data, Yazdanfar and Ohman (2014) provide empirical evidence that the CCC has a significant effect on the company profitability. Singh and Kumar (2014) examined the findings of previous studies of CCC's influence on the company profitability by applying a meta-analysis technique. They took a set of 46 research papers and the results confirmed that the CCC was related to the profitability of the company.

Some studies use the net trade cycle (NTC) as a measure of working capital management in relation to the profitability of the company. Shin and Soenen (1998) analyzed a sample of US public companies and their results showed a negative effect of the net trade cycle on profitability. By using the data panel of manufacturing listed firms in Pakistan, the results of the study of Raheman, Afza, Qayyum, and Bodla (2010) also shows that the net trade cycle negatively affects company performance. Karadagli (2012) examined the effect of the net trade cycle on firm performance in a sample of Turkish listed companies. However, the findings of the Karadagli's study show that an increase in the net trade cycle improves performance in terms of both the operating income and the stock market return for SMEs.

A number of other studies are interested in each component of working capital management. Deloof (2003) took a sample of large Belgian companies and showed a significant negative relationship between profitability and the length of days for the period of accounts receivable, inventories, and trade payable. Mathuva (2010) examined the effect of working capital management components on the profitability of Kenyan listed firms. This Mathuva's study found a significant negative relationship between collection period accounts and profitability, which means that the short time the cash billing for consumers increases the profitability of the company. However, a significant positive relationship was found in this Mathuva's study between both the inventory conversion period and the period of payment to creditors with profitability. Similar research, testing the item details from working capital management, was also conducted by Kasozi (2017) on the listed manufacturing firms in South Africa and by Lyngstadaas and Berg (2016) in the small-and medium-sized Norwegian firms.

Some other studies consider two approaches to both conservative and aggressive strategies of working capital management. Nazir and Afta (2009) examined the potential relationship of aggressive / conservative policies and the profitability of companies from Pakistani firms. However, a well-known research in this regard is Baños-Caballero *et al.* (2012), Baños-Caballero, García-Teruel, and Martínez-Solano (2014) which began with showing quadratic non-linear relations between working capital management and the company profitability. Similar results from concave relations are also shown by Afrifa and Padachi (2016) in small and medium-sized companies listed on the UK stock market and Altaf and Shah (2017) in Indian non-financial companies. These results imply the existence of an optimal level of investment in working capital that balances benefits and costs so as to maximize value.

In summary, the results of previous studies suggest that company managers can create value for their shareholders by carrying out working capital management at the right level of investment. Furthermore, the attention of several current studies also leads to funding working capital needs and their relation to the company profitability.

Using data from Spanish SMEs, Baños-Caballero, García-Teruel, and Martínez-Solano (2016) examined the relationship between financing of working capital requirements and firm performance. They showed that the right funding strategy for working capital requirements can help companies improve profitability. This finding encouraged Dinçergök (2018) to also conduct similar research on open-air companies in Turkey. The results of his research showed that there are concave-shaped relations between short-term financial debt that are used to fund working capital needs and firm performance. However, Panda and Nanda (2018) found Convex's relationship between the financing of working capital requirements and profitability in a number of Indian public sector companies.

The need for working capital and project investment must be funded so that the company can run. The availability of long-term and short-term sources of finance requires company managers to make choices between the two sources. In this situation, company managers can choose aggressive funding policies or conservative funding policies (Berk & DeMarzo, 2014). When companies finance all permanent working capital using short-term debt, this policy is known as an aggressive funding policy. When yield curves are upward sloping, the interest rate on short-term debt is lower than long-term debt (Berk & DeMarzo, 2014). This encourages firm managers to prefer the use of short-term debt.

However, the benefits of lower short-term interest rates will be masked by the risk that companies may face debt refinancing at higher interest rates in the future, thereby enlarging the firm's equity cost of capital (Berk & DeMarzo, 2014). On the contrary, the company can fund the needs of permanent working capital and its fixed assets by using long-term debt, or what is known as a conservative financing policy. In order to implement such a policy effectively, there will necessarily be periods when excess cash is available—those periods when the company requires little or no investment in temporary working capital (Berk & DeMarzo, 2014). In this policy, corporate loans become less volatile in the short term.

Table 1 summarizes the arguments that mention in the study of Baños-Caballero *et al.* (2016), Dinçergök (2018), and Panda and Nanda (2018) regarding the benefits and risks of using short-term debt in financing working capital needs. Those benefits motivate managers to use short-term debt in order to fund working capital needs. However, the potential risks that could arise would limit the use of short-term debt. Thus, benefits obtained by the company in using short-term debt financing will be limited. In this case, it is expected that inverse U-shaped relations occur between working capital financing and profitability (Dinçergök, 2018). If the ratio of short-term debt to the company's working capital requirements is still low, increasing short-term debt will benefit and therefore increase profitability. However, if the ratio is very high, the addition of short-term loans will increase the risk that increases costs and ultimately reduces profitability. In other words, following Baños-Caballero *et al.* (2016), when the short-term debt used to fund working capital requirements is low, the addition will increase profitability. However, when the short-term debt used to fund working capital requirements is high, the addition will reduce profitability.

This study intends to examine the effect of working capital financing on profitability in the basic industry and chemicals sector. The hypothesis is set:

 H_1 : The relationship between short-term debt used to fund working capital requirements and the profitability in Indonesian public companies from the basic industry and chemicals sector can be expressed in the form of an inverted U.

Table 1
Use of Short-Term Debt in Financing of Working Capital Requirements

Advantages: Short-term debt interest rates are smaller than long-term debt. Short-term debt faces the risk of increasing the interest rate in its renewal. Short-term debt has a problem of extension, especially for companies that have high short-term debt. Short-term debt is more easily adjusted to the company's financial needs. Short-term debt can reduce conflicts between shareholders and long-term debt holders.

Source: Summarized from Baños-Caballero et al. (2016), Dinçergök (2018), Panda and Nanda (2018)

RESEARCH METHOD

The Indonesia Stock Exchange divides all companies listed in various sectors based on their characteristics of the business. As discussed in the introductory section, this study focuses on investigating non-financial companies from basic industry and chemicals sector. A number of investigations have demonstrated that the nature of corporate working capital is significantly different between industries, both in terms of statistical measures (Pais & Gama, 2015; Lyngstadaas & Berg, 2016) as well as their effect on profitability (Yazdanfar & Ohman, 2014; Afrifa & Padachi, 2016). Therefore, this study has anticipated the possibility of problems that arise because of industry-specific issues.

The data used in this research comes from financial statements of publicly listed companies on the Indonesia Stock Exchange. The company is required to have the availability of financial reports published in order to enter into the research sample. The financial statements of the company under study are for a period of three years and on the latest data that can be obtained, namely 2016–2018. In this way, this study uses panel data that contain data across time and across companies.

With reference to the study of Baños-Caballero *et al.* (2016) and Dinçergök (2018), this research estimates the following model to examine the association among working capital funding and company performance:

$$ROE_{it} = \beta_0 + \beta_1 WCF_{it} + \beta_2 WCF_{it}^2 + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 AGE_{it} + \beta_6 FA_{it} + \beta_7 CR_{it} + \beta_8 DIV_{it} + \epsilon_{it}$$

$$(1)$$

To test the effect of working capital financing on the company profitability, this research uses a measure of accounting-based financial performance as the dependent variable. Following the study of Baños-Caballero *et al.* (2016) and Dinçergök (2018), the dependent variable is return on equity (ROE). In this case, return on equity is a net profit as a proportion of shareholders' equity. In other words, return on equity is computed by dividing profits after taxes by common equity.

The independent variable is working capital financing (WCF). WCF variables are calculated as short-term loans divided by working capital requirements (Baños-Caballero *et al.*, 2016; Dinçergök, 2018; Panda & Nanda, 2018). Technically, working capital requirements (WCR) is determined as current assets minus accounts payable, while short-term loans are proxied using short-term bank loans. Then WCF^2 is obtained by calculating the square of working capital financing. Referring to the research hypothesis a concave relation between short-term funding and financial performance, then β_I is expected to be positive and β_2 is expected to be negative.

Six control variables are SIZE, LEV, AGE, FA, CR, and DIV. SIZE is measured as the natural logarithm of total assets. LEV is calculated by dividing total liabilities by total assets. AGE states the company's long years of establishment. FA is a fixed assets divided by total assets. CR is current assets divided by current liabilities. The DIV is sought by dividing cash dividends by total assets. The selection of the five control variables refers to previous studies that are commonly found in the effect of working capital on company profitability. All research variables are presented in Table 2.

Table 2 Variable Description

Variable Name	Definitions	Calculation
ROE	Return on Equity	Net Income / Total Assets
WCF	Working Capital Financing	Short Term Bank Debt / (Current Assets – Account Payable)
SIZE	Size	Ln (Total Assets)
LEV	Leverage	Total Debt / Total Assets
AGE	Age	Calender Year – Incorporation Year
FA	Fixed Assets	Tangible Net Fixed Assets / Total Assets
CR	Current Ratio	Currents Assets / Current Liabilities
DIV	Dividen	Cash Dividend / Total Assets

Still referring to the study of Baños-Caballero *et al.* (2012) and Dinçergök (2018), the relationship between working capital funding and company performance estimated in equation (1) is examined again for robustness by applying the following model:

$$ROE_{it} = \beta_0 + \beta_1 WCFL_{it} + \beta_2 WCFH_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 AGE_{it} + \beta_6 FA_{it} + \beta_7 CR_{it} + \beta_8 DIV_{it} + \epsilon_{it}$$
 (2)

Two dummy variables were created in this study, namely WCFL for companies that have low WCF and WCFH for companies that have high WCF. More specifically, if the WCF value of a company is below the WCF median value, WCFL is 1; otherwise, WCFL takes the value of zero. Whereas if the WCF value of a company is above the median WCF value, then WCFH is 1; otherwise, WCFH takes the value of zero. An inverse U-shape relation between short-term funding and profitability is supported if β_I is positive and β_2 is negative.

Data analysis of this study was carried out using panel data analysis. The panel data in this research are characterized by a wider range of cross-sectional data than between years. Panel data like this can be estimated by applying pooled models. However, the application of pooled least squares in pooled models has limitations, especially in less realistic assumptions about the existence of zero error correlations between times in the same company. Therefore, this was solved by applying the cluster-robust standard errors when estimating the regression equation (Hill, Griffiths, & Lim, 2011). Research data processing shows that the Breusch-Pagan test indicates a non-significant result rejecting the null hypothesis. The insignificant results of the Breusch-Pagan test lead to conclusions about the absence of random effects (Hill *et al.*, 2011). Therefore, the equation in the panel data in this research is estimated using the fixed effect model.

FINDINGS

Table 3 shows descriptive statistics of research variables, which include profitability, working capital financing, and other relevant variables. The first variable of concern is return on equity (ROE). During the analysis period, the average ROE of companies in basic industry and chemicals sectors is 0.1021 or 10.21 percent. The second variable is working capital financing (WCF). The average WCF is 0.4530. This means that on average short-term financial debt funds as much as 45.30 percent of working capital needs. Some of the following variables are company size (SIZE), leverage (LEV), company age (AGE), fixed assets (FA), current assets (CR), and cash dividends (DIV). The mean value of SIZE is 22.81, LEV is 54.47 percent, AGE is 34.78 years, FA is 41.79 percent, CR is 2.21 times, and DIV is 0.093 percent. In addition, the table also shows these variable values in standard deviation, 10^{th} percentile, median, and 90^{th} percentile.

Table 3
Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	p10	p50	p90
ROE	189	0.1021	1.9704	-0.1263	0.0409	0.1825
WCF	189	0.4530	1.0567	0.0000	0.2198	0.8809
SIZE	189	22.8052	5.2978	15.1083	25.6195	28.4129
LEV	189	0.5447	0.3691	0.1595	0.5136	0.8406
AGE	189	34.7831	9.6602	22.0000	35.0000	45.0000
FA	190	0.4179	0.2202	0.1419	0.4432	0.6999
CR	189	2.2101	2.3331	0.8037	1.3085	4.8856
DIV	189	0.0093	0.0213	0.0000	0.0000	0.0278

Table 4 provides Pearson correlation between research variables. Overall, the correlation between all research variables is less than 0.5. Furthermore, one test was conducted to make certain the absence of collinearity problems in the analysis of this investigation. One way is to estimate the auxiliary regressions and then check the amount of R^2 from each of the estimated auxiliary regressions (Hill *et al.*, 2011). This procedure is done by regressing WCF, SIZE, LEV, AGE, FA, CR, and DIV, which then search for each R^2 for the seven equations. The value of R^2 for the seven equations is 0.0878, 0.1309, 0.2822, 0.0911, 0.2546, 0.4032, and 0.0793. The R^2 value found from the artificial model is not high, so collinearity is concluded not to be a problem with this analysis.

Table 4
Pearson Correlation Matrix

Variables	ROE	WCF	SIZE	LEV	AGE	FA	CR
ROE	1						
WCF	-0.0595	1					
SIZE	0.0038	0.0828	1				
LEV	0.0479	0.1211*	0.0081	1			
AGE	-0.0375	-0.0172	-0.2315***	-0.0512	1		
FA	-0.0976	0.0175	-0.2438***	-0.1026	0.1186	1	
CR	-0.0334	-0.2426***	0.1674*	-0.4170***	0.0925	-0.3665*	1
DIV	0.0014	-0.1318*	-0.0668	-0.2508***	0.0769	0.0397	0.1279*

*p<0.10, **p<0.05, ***p<0.01

Table 5 provides the estimation results from equation (1). The dependent variable of this research is the company's profitability as measured by ROE. The WCF coefficient is positive and statistically significant at the 10 percent

level. The WCF² coefficient is negative and statistically significant at the five percent level. These results provide findings as expected, which are positive for the WCF coefficient and negative for the WCF^2 coefficient. Therefore, these results provide support for the H_1 research hypothesis regarding the inverse U relationship between WCF and profitability.

Table 6 presents the estimation results from equation (2) to further test the research data. The dependent variable is still the company's profitability as measured by ROE. The WCFL coefficient is positive and statistically significant at the 1 percent level. But unfortunately the WCFH coefficient is not statistically significant. The expectation of the coefficient sign is positive for WCFL and negative for WCFH. This finding is discussed in the discussion in the next section.

Table 5
Financing of Working Capital and Profitability

Variables	Coef.	Robust Std. Err.	t	P>t
WCF	0.8812*	0.4933	1.7900	0.0790
WCF^2	-0.0936**	0.0467	-2.0000	0.0490
SIZE	-0.0404	0.0298	-1.3600	0.1800
LEV	4.5933*	2.6597	1.7300	0.0890
AGE	0.0723	0.0471	1.5300	0.1300
FA	-1.2342*	0.7218	-1.7100	0.0920
CR	-0.0051	0.0513	-0.1000	0.9210
DIV	0.8947	1.0676	0.8400	0.4050
Constant	-3.7524*	2.0116	-1.8700	0.0670
Number of obs.	189			
Number of firms	66			

^{*}p<0.10, **p<0.05, ***p<0.01

Table 6
Financing of Working Capital and Profitability: Additional Estimation

Variables	Coef.	Robust Std. Err.	t	<i>P>t</i>
WCFL	0.1117***	0.0343	3.2500	0.0020
WCFH	0.2378	0.2772	0.8600	0.3940
SIZE	-0.0373	0.0297	-1.2500	0.2150
LEV	3.3386	2.1982	1.5200	0.1340
AGE	0.0620	0.0436	1.4200	0.1600
FA	-0.8136	0.5931	-1.3700	0.1750
CR	0.0042	0.0453	0.0900	0.9270
DIV	1.2596	0.7993	1.5800	0.1200
Constant	-2.8775*	1.6204	-1.7800	0.0800
Number of obs.	189			
Number of firms	66			

^{*}p<0.10, **p<0.05, ***p<0.01

DISCUSSION

This research is concerned with relatively small debt funding for working capital needs of Indonesian public companies in basic industry and chemicals sector. The median value of working capital financing (WCF) is 0.2198. This finding means that in the median value, short-term financial debt funds around 22 percent of working capital needs. Half of the firms in the sample have WCF below 0.2198, and the other half have WCF above 0.2198.

The results of the study provide findings as expected in the research hypothesis regarding concave relationships between WCF and profitability. The findings of this study confirm the study findings of Baños-Caballero *et al.* (2016) and Dinçergök (2018). This research provides empirical evidence from Indonesian public companies in basic industry and chemicals sector. In this case, if the company's relatively small debt ratio to working capital requirements is still low, adding short-term debt will increase the financial performance of the firm. However, if that ratio is very high, then profitability increases with a decrease in short-term loans.

However, the results of the robustness test of this study further confirm the relationship that occurred at the time the company WCF was lower than high. In this situation, if the ratio of relatively short debt to the company's working capital requirements is still low (below the median), then adding short-term debt will enjoy the benefits and therefore increase profitability. In other words, when the relatively short debt used to fund the working capital requirements is low, the addition will increase profitability.

CONCLUSION

This research aims to examine the influence of working capital financing on the profitability of Indonesian public companies in the basic industry and chemical sector for the period of 2016–2018. The results of this research show that the relationship between working capital funding and profitability can be expressed in an inverted U shape. Here opportunities for improvement arise, especially for companies that still have a relatively short amount of funds for working capital needs. In these companies, performance can be sought to increase by appending the proportion of short-term funding. Therefore, this research presents practical recommendations so that company managers increase the proportion of relatively short debt funding when the proportion is still low.

This research has disadvantages. First, this research is not able to convey how much the optimal level of relatively short funding for working capital needs. This can be interesting in terms of short-term funding practices that provide policy guidance for managers of Indonesian companies. Therefore, future research is good if it can arrive at the calculation of the optimal level. The second weakness is this research is still limited to the basic industry and chemicals sector. For this reason, one option for future research is to explore samples of companies from other sectors. This will add a complete insight into understanding.

REFERENCES

- Afrifa, G. A., & Padachi, K. (2016). Working capital level influence on SME profitability. *Journal of Small Business and Enterprise Development*, 23(1), 44–63.
- Altaf, N., & Shah, F. A. (2018). How does working capital management affect the profitability of India companies? *Journal of Advances in Management Research*, *15*(3), 347–366.
- Atrill, P. (2014). Financial management for decision makers. 7th Edition. New York, NY: Pearson Education Limited.
- Baños-Caballero, S., García-Teruel, P.J., & Martínez-Solano, P. (2012). How does working capital management affect the profitability of Spanish SMEs? *Small Business Economics*, 39(2), 517–529.
- ----- (2014). Working capital management, corporate performance, and financial constraints. *Journal of Business Research*, 67, 332–338.
- ----- (2016). Financing of working capital requirement, lexibility and SME performance. *Journal of Business Economics and Management*, 17(6), 1189–1204.
- Berk, J., & DeMarzo, P. (2014). *Corporate finance*. 3rd Edition. Upper Saddle River, New Jersey: Pearson Education, Inc.
- CNN Indonesia Online Business News. (2017). OJK: 69 persen dana dari lantai bursa untuk modal kerja. *CNNindonesia.com* Retrieved January 24, 2019, from https://www.cnnindonesia.com/ekonomi/20170412 184625-92-207110/ojk-69-persen-dana-dari-lantai-bursa-untukmodal-kerja.
- Darun, M. R., Roudaki, J., & Radford, J. (2015). The evolution of working capital management research. *International Business Management*, *9*(5), 987–997.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3/4), 573–587.
- Dinçergök, B. (2018). Financing of working capital requirement and profitability: Evidence from Borsa Istanbul chemical, petroleum, rubber, and plastic sector. In G. Kucukkocaoglu, & S. Gokten, *Financial management from an emerging market perspective* (pp. 175–187). http://dx.doi.org/ 10.5772/intechopen.72760.
- Filbeck, G., & Krueger, T. M. (2005). An analysis of working capital management results across industries. *Mid American Journal of Business*, 20(2), 12–18.
- Hill, R. C., Griffiths, W. E., & Lim, G. C. (2011). *Principles of econometrics*. 4th Edition. New Jersey, NJ: John Wiley & Sons, Inc.
- Karadagli, E. C. (2012). The effect of working capital management on the profitability of Turkish SMEs. *British Journal of Economics, Finance and Management Sciences*, 5(2), 36–44.
- Kasozi, J. (2017). The effect of working capital management on profitability: A case of listed manufacturing firms in South Africa. *Investment Management and Financial Innovations*, *14*(2), 336–346.

- Lyngstadaas, H., & Berg, T. (2016). Working capital management: Evidence from Norway. *International Journal of Managerial Finance*, 12(3), 295–313.
- Mathuva, D. M. (2010). The influence of working capital management components on corporate profitability: A survey on Kenyan listed firms. *Research Journal of Business Management*, *4*(1), 1–11.
- Miswanto (2012). Kebijakan dalam penentuan dan pendanaan modal kerja perusahaan. *Jurnal Economia*, 8(2), 181–195.
- Mulyono, S., Djumahir, D., & Ratnawati, K. (2018). The effect of capital working management on the profitability. *Jurnal Keuangan dan Perbankan*, 22(1), 94–102.
- Nazir, M. S., & Afza, T. (2009). Impact of aggressive working capital management policy on firms' profitability. *The IUP Journal of Applied Finance*, *15*(8), 19–30.
- Pais M. A., & Gama, P. M. (2015). Working capital management and SMEs profitability: Portuguese evidence. *International Journal of Managerial Finance*, 11(3), 341–358.
- Panda, A. K., & Nanda, S. (2018). Working capital financing and corporate profitability of Indian manufacturing firms. *Management Decision*, 56(2), 441–457.
- Raheman, A., Afza, T., Qayyum, A., & Bodla, M. A. (2010). Working capital management and corporate performance of manufacturing sector in Pakistan. *International Research Journal of Finance and Economics*, 47, 156–163.
- Rustandi, F., Supriatna, N., Nugraha, & Supiyadi, D. (2018). Pengaruh manajemen modal kerja terhadap profitabilitas pada bank konvensional periode 2013–2017. *Jurnal Ilmu Manajemen & Bisnis*, 9(2), 44–55.
- Shin, H. H., & Soenen, L. (1998). Efficiency of working capital and corporate profitability. *Financial Practice and Education*, 8(2), 37–45.
- Singh, H. P., & Kumar, S. (2014). Working capital management: A literature review and research agenda. *Qualitative Research in Financial Markets*, 6(2), 173–197.
- Yazdanfar, D., & Ohman, P. (2014). The impact of cash conversion cycle of firm profitability: An empirical study based on Swedish data. *International Journal of Managerial Finance*, 10(4), 442–452.

RETAIL COMPANY PERFORMANCE IN INDONESIA BASED ON FINANCIAL RATIO ANALYSIS: WARREN BUFFETT'S PERSPECTIVE

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ABSTRACT

This research aim at determining the performance of retail companies in the Indonesia based on the analysis of financial ratios using Warren Buffett's perspective. Total number of sample is 10 companies listed in Indonesia Stock Exchange in 2014-2017. The analysis of financial ratio includes Earning Per Share (EPS), Price to Earnings Ratio (PER), Price to Book Value (PBV), Return on Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER) and RoCE (Return on Capital Employee). First, this research examined the effect of those seven financial ratios on stock prices either partially. Afterwards, only financial ratio that had a significant effect on stock prices are analyzed using Warren Buffett. Hypothesis testing was conducted using Multiple Linier Regression analysis. The results point out that: 1) EPS, PBV, ROE, and DER partially effect to stock prices; 2) ACES meets 4 of 4 determined criteria for good company according to Warren Buffett. The criteria are the company has EPS growth for 4 consecutive years, has ability to pay off debt, and has consistent ROE> = 15%.

Keywords: Retail companies, financial ratios, financial performance, stock price, Warren Buffet.

INTRODUCTION

According to Berman, Evans, and Chatterjee (2018) retail business is a business activity that sells goods and services to the final consumers. This sector supports Indonesian economy because in 2016, it contributed 5.24% of the total of GDP and absorbed 22.4 million or 31.81% of workforce from the non-agricultural sector (Tim Sindonews, 2017). In addition, according to Global Retail Development Index (GRDI), Indonesia was listed in the top ten most attractive countries in the retail sector in 2017 (Margrit, 2017).

However, in 2017 to 2019, retail outlets in several shopping centers in Indonesia were closed. In 2019, 4.300 outlets are estimated to close (Mangkuto, 2019). The outlet closure is caused by changes in consumers' life style, changes in priority from consumption to investment, weak purchasing power, economic slowdowns, and shifting offline shopping patterns to online shopping (Fitriya, 2017). Besides, this closure is the opportunity for companies to expand and relocate to other prospective areas (Bella, 2018). Therefore, this phenomenon needs to be considered by retailers by implementing Omnichannel Retailing, to provide a shopping experience to consumers through various channels, both physical and digital (Rigby, 2011).

The phenomenon of retail outlets closure has attracted the researcher to identify further about the feasibility or the prospects of retail sector to be investment choices and performance of retail sector from the perspective of financial management. According to Fahmi (2014), an overview of a company's performance can be observed from its financial statement. He also states that a financial statement can help investors decide to buy or sell stocks after analyzing the company's prospect in the future. Samsul (2015) says that the company's performance reflects its operating income and net income per unit of shares, as well as several financial ratios that can describe the strength of management in managing the company.

This research used seven financial ratios influencing stock prices namely Earning Per Share (EPS), Price to Earnings Ratio (PER), Price to Book Value (PBV), Return on Equity (ROE), Current Ratio (CR), Debt to Equity Ratio (DER) and RoCE (Return on Capital Employee). The stock price is one of the indicators of the success of the company management. If the stock price of a company always increases, investors or candidates of investor assume that the company is successful in managing its business (Astuty, 2017). In this case, multiple linear regression analysis will examine whether the influence appears or not. Ratios affecting the stock price will be observed from Warren Buffett's perspective as the reference for candidates of investor before they buy certain company stocks.

Warren Buffett is the most successful investor in the world who is also a commissioner, president director, and the largest shareholder in Berkshire Hathaway. Buffett and Clark (2002) state that Warren Buffett is interested in companies with earning per share that has grown up over ten years. According to Eduwinsah and Sitorus (2018), "Warren Buffett chooses a company's share based on the company values with the following criteria: 1) the

business company is understandable, 2) it has profitable long-term prospects, 3) the company is running by honest and competent people 4) it has attractive business prices".

Earning Per Shares shows profits given by shareholders from each share owned (Fahmi, 2014). The higher the EPS value, the better the company's ability in providing returns to investors. Price Earnings Ratio (PER) shows investors' assessment in the company's growth prospect in the future reflected in share prices (Sudana, 2015). Price to Book Value (PBV) can be used to compare the market value and the book value of the company. According to Brigham and Houston (2018), "Return of Equity (ROE) measures the rate of return on investment of ordinary shareholders". The current ratio shows the company's ability in providing current assets to pay current liabilities (Sudana, 2015). The higher the Current Ratio, the greater the company's ability to pay off the current liabilities. Debt to Equity Ratio (DER) measures the ratio between total liabilities and total common equity (Brigham & Ehrhardt, 2017). The smaller the Debt to Equity Ratio (DER), the smaller the percentage of the company's debt. Return on Capital Employed (RoCE) shows efficiency and profitability for the company's capital investment (Morsy & Rwegasira, 2010).

LITERATURE REVIEW AND HYPOTHESIS

The researches on fundamental factors affecting stock prices have conducted by several researchers in Indonesia and other countries. Petcharabul and Rompasert (2014) study the relationship between financial ratios and stock returns in technology sector companies in Thailand Stock Exchange from 1997 to 2011. The research used five financial ratios, namely current ratio, debt-to-equity ratio, inventory turnover ratio, return on equity ratio, and price-earnings ratio. According to the result of the regression analysis, only ROE and PER have a significant relationship on stock returns.

Dita and Murtaqi (2014) find out that net profit margin and debt to equity ratio have a positive influence, while Price to Book Value has a negative influence on stock returns. Net profit margin, price to book value, and debt equity ratio simultaneously have a significant influence on stock returns. The research has been conducted to the consumer goods industry in Indonesia in 2009 to 2013.

Allozi and Obeidat (2016) examine the relationship between profitability ratio ((net profit margin (NPM), gross profit margin (GPM), return on assets (ROA), return on equity (ROE), earnings per share (EPS)) and leverage ratio ((debt ratio (DR), debt to equity ratio (DER), interest coverage ratio (CR)) with stock returns at Jordan. The research samples were 65 manufacturing companies in 2001 to 2011 in Amman Stock Exchange. The research result shows that gross profit margin, return on equity, return on assets, and earnings per share have a significant relationship on stock returns. Meanwhile, net profit margin and ratio leverage have no significant relationship on stock returns.

Sukhija (2014) examines fundamental factors affecting stock prices in 200 companies listed in Bombay Stock Exchange (BSE) India by using the inter-industrial approach in 1998 to 2013. This research concludes that book value, dividend per share and growth are the main determiners of banking and financial companies' stock prices. PER, book value, and growth are the determiners of petroleum and mining companies' stock prices. PER, book value, Cover and DPS are the significant determiners of infrastructure companies' stock prices. Book value, DPS and PER are the main determiners of metal and chemical companies' stock price. Book value, ROCE and earning per share are the main determiners of IT and communication companies' stock prices.

Gursida (2017) examines the influence of fundamental and macroeconomic analysis on the stock price in the companies listed in Indonesia Stock Exchange. The fundamental analysis uses current ratio, debt to equity ratio (DER), earning per share (EPS), return on assets (ROA), and total assets turnover (TATO), while the macroeconomic analysis uses inflation and exchange rate. The fundamental analysis shows that Current ratio (CR) and ROA has a positive influence on stock prices while debt to equity ratio (DER), earning per share (EPS) and total assets turnover (TATO) has no influence on stock prices. The result of macroeconomic analysis is that the inflation rate has no influence on stock prices, while the exchange rate has a negative influence on stock prices.

Malhotra and Tandon (2013) examine factors influencing stock prices on 95 companies listed in National Stock Exchange (NSE) India in the period of 2007–2012. The research result shows that book value, earning per share and price earnings has a significant positive influence on companies' stock prices.

Astuty (2017) states the influence of fundamental factors and systematic risks on stock prices in the companies listed in LQ45 Index in the period of 2011–2015. The research result shows that simultaneously, price earnings ratio (PER), earning per share (EPS), net profit margin (NPM), price to book value (PBV), and systematic risks have a significant influence on stock prices in the companies listed in LQ45 Index in the period of 2011–2015. Partially, earnings ratio (PER), earning per share (EPS), net profit margin (NPM), price to book value (PBV), and systematic risks have a significant influence on stock prices.

Pratama, Azizah, and Nurlaily (2019) examine the influence of financial performances on stock prices in 13 companies in Jakarta Islamic Index listed in the Indonesia Stock Exchange in 2014–2017. The companies' financial performances can be observed through financial ratios namely return on equity, earning per share, current ratio, and debt to equity ratio. Their research was explanatory research using a quantitative approach. The data analysis used was multiple linear regression analysis. According to the examination result conducted simultaneously, variables of return on equity (ROE), earning per share (EPS), current ratio (CR) dan debt to equity ratio (DER) have a significant influence on stock prices. According to the examination result conducted partially, variables of return on equity (ROE) and earning per share (EPS) has a significant positive influence on stock prices. Meanwhile, current ratio (CR) and debt to equity ratio (DER) have no significant influence on stock prices.

Hadi and Nurhayati (2018) find out that ROE has a positive influence on stock prices. Guritno (2013) finds that current ratio, ROE, firm size has partially no significant influence on stock returns. Utami and Darmawan (2019) find out that earning per share and market value added have a positive influence on stock prices, while debt to equity ratio, return on assets and return on equity partially have no influence on stock prices. Cahyaningrum and Antikasari (2017) find out that EPS, PBV, ROA, and ROE in 2010–2014, simultaneously and partially, have a positive influence on financial sector companies' stock prices. Meanwhile, Herawati and Putra (2018) find out that DER, CR, and PER have no significant influence on food and beverages companies' stock prices.

The Influence of Earning Per Share on Stock Prices

EPS is the net income per share given to ordinary shareholders (Brigham & Ehrhardt, 2017). The higher the profit per share, the better the company's financial capability showed by dividends and high retained earnings (Maholtra & Tandon, 2013). The higher the EPS, the better the company's prospect for investors because higher income can be achieved. This situation can attract investor in buying shares. The increase in the number of stock requests may cause the company's stock prices to increase. The previous researches by Utami and Darmawan (2019), Cahyaningrum and Antikasari (2017), Astuty (2017), and Idawati and Wahyudi (2015) show that earning per share has a positive influence on stock prices. Therefore, the hypothesis formulated is:

 H_1 : Earning per share affects stock prices

The Influence of Price to Earnings Ratio on Stock Prices

PER shows investors' assessment of the companies' growth prospects in the future reflected in stock prices (Sudana, 2015). The price/earnings (P/E) ratio shows how much investors are willing to pay per dollar of reported profits (Brigham & Ehrhardt, 2017). A fast-growing a company has higher PER compared to the risk company. Growth prospect can attract investors to invest in companies by buying shares. High demand on stock may lead to increasing stock prices. The low PER ratios tend to be followed by fast-growing stock prices, while the high PER ratios will be followed by slow-growing stock prices (Astuty, 2017). Rahmadewi and Abundanti (2018), Malhotra and Tandon (2013), Astuty (2017) state that Price to Earnings Ratio has a positive influence on stock prices. Therefore, the proposed hypothesis is:

 H_2 : Price to Earnings Ratio affects stock prices

The Influence of Price to Book Value on Stock

PBV value shows the comparison between market values and book values of the company. Cahyaningrum and Antikasari (2017) show that a company that has good performances will achieve high PBV values. The better performance of a company leads to higher PBV ratios annually. The increase in performance will be followed by the increase in stock prices due to higher demand in stocks. This is supported by Astuty (2017) who finds out that PBV has a positive influence on stock prices. Therefore, the hypothesis proposed is:

 H_3 : Price to Book Value affects stock prices

The Influence of Return on Equity on Stock Prices

Return on Equity shows the comparison between operating income and equity (Samsul, 2015). If more profits are generated, investors get greater profits on their investments. The greater ratios lead to the more efficient own capital management (Sudana, 2015). Therefore, this will be a good signal for investors regarding companies' future prospects. In addition, the increase in ROE is expected to be followed by the increase in stock prices. This is in line with Cahyaningrum and Antikasari (2017), Hadi and Nurhayati (2018), who find out that ROE has a positive influence on stock prices. The following hypothesis is proposed as follows:

 H_4 : Return on Equity affects stock prices.

The Influence of Current Ratio on Stock Prices

Current ratio measures companies' capability to pay current liabilities with their current assets (Sudana, 2015). The greater ratio shows that the company is more liquid. In this case, the company has good performances which attract investors to buy the company's shares. Investors' interest in buying shares will lead to the increase in stock prices. Choi and Sias (2012) declare that an increase in current ratio can be used to predict an increase in stock returns. Gursida (2017) find out that CR has a positive influence on stock prices. The higher current ratio, the higher stock prices. Therefore, the hypothesis is formulated as follows:

*H*₅: Current Ratio affects stock prices

The Influence of Debt to Equity Ratio on Stock Prices

Debt to equity ratio is total liabilities divided by total common equity (Brigham & Ehrhardt, 2017). The lower ratio is better for companies because they will achieve greater equity to pay debts so that investors feel safe (Fahmi, 2014). If companies are able to pay the obligation to creditors on time, they have good performances that can attract investors to buy their shares. The more investors who are interested to buy, the higher stock prices will be. Therefore, a low debt ratio that is followed by companies' capability in paying obligation to creditors on time will lead to the increase in stock prices. Therefore, the hypothesis is proposed as follows:

 H_6 : Debt to Equity Ratio affects stock prices

The Influence Return on Capital Employee on Stock Prices

According to Sukhija (2014), RoCE is one of the factors influencing IT and communication companies' stock prices in India. RoCE shows the efficiency and the profitability of a company's investment capital (Morsy & Rwegasira, 2010). The greater RoCE leads to the use of capital which is more efficient as well as the profit generated by the company which is greater. Hence, the hypothesis is proposed as follows:

 H_7 : Return on Capital Employee affects stock prices

RESEARCH METHOD

Population and Sample

The population in this research were 25 retail sub-sector companies listed in Indonesia Stock Exchange in 2014–2017. The samples were chosen with certain consideration in which the company has a positive profit based on the financial statement published during the period of 2014 to 2017 or using purposive sampling method (Sugiyono, 2017). Ten companies meeting the criteria are presented in the Table 1 as follows:

Table 1
The Companies List at Retail Subsector

Code	Company Name
ACES	Ace Hardware Indonesia Tbk
AMRT	Sumber Alfaria Trijaya Tbk
CSAP	Catur Sentosa Adiprana Tbk
ERAA	Erajaya Swasembada Tbk
HERO	Hero Supermarket Tbk
LPPF	Matahari Departemen Store bk
MAPI	Mitra Adiperkasa Tbk
MIDI	Midi Utama Indonesia Tbk
RALS	Ramayana Lestari Sentosa Tbk
TELE	Tiphone Mobile Indonesia Tbk

Source: www.idx.co.id, 2019

Data

This research used secondary data in the form of annual closing stock prices and the financial statement during the period of 2014 to 2017. The financial statement was used to identify financial ratios as follows:

1) Earning Per Share

Earning per share is the profit given to shareholders for each share they have (Fahmi, 2011).

Net income available to common stockholders The formula is EPS =

Common shares outstanding

2) Price to Earnings Ratio

This ratio shows how much investors are willing to pay per dollar of reported profits (Brigham & Ehrhardt, 2017).

The formula is $PER = \frac{price per share}{Earning per share}$

3) Price to Book Value

Price to Book value compare market price per share with book value per share (Fahmi, 2014). The formula is Market price per share

Book value per share

4) Return on Equity (ROE)

ROE measures the rate of return on investment of (Brigham & Houston, 2018). The formula is ROE = **Earning After Taxes**

Total Equity

5) Current Ratio (CR)

According to Brigham and Ehrhardt (2017), current ratio is the comparison between current assets and current liabilities. Generally, creditors are interested in companies with high current ratios.

current assets The formula is CR= current liabilities

6) Debt to Equity Ratio

Debt to equity ratio is total liabilities divided by total common equity (Brigham & Ehrhardt, 2017). The formula

Total debts Total common equity

7) Return on Capital Employee (RoCE)

RoCE shows the efficiency and the profitability of a company's investment capital (Morsy & Rwegasira, 2010).

The formula is $RoCE = \frac{--}{Total Assets-Current Liabilities}$

FINDINGS

The Result of Multiple Linear Regression Analysis Test

Multiple Linear Regression Analysis is conducted to examine the influence of the seven financial ratios on stock prices. Before conducting regression analysis, classical assumption tests consisted of normality, multicollinearity, autocorrelation and heteroscedasticity are conducted. The data is categorized to pass all four tests. The regression results are presented in the Table 2.

Table 2. The Results of Multiple Linear Regression Analysis

	Model	Unstandardized Coefficients		Standardized Coefficients	4	Ci.a
	Model	В	Std. Error	Beta	ι	Sig.
1	(Constant)	212.668	623.566		0.341	0.735
	EPS	25.570	1.831	1.056	13.962	0.000
	PER	3.917	2.659	0.061	1.473	0.150
	PBV	468.786	84.473	4.297	5.550	0.000
	ROE	-15407.761	2868.878	-4.549	-5.371	0.000
	CR	64.398	115.126	0.028	0.559	0.580
	DER	387.895	185.305	0.256	2.093	0.044
	RoCE	1415.335	863.206	0.140	1.640	0.111

a. Dependent Variable: Closed price

Based on Table 2, the equation of the multiple linear regression analysis is Y = 212.668 + 25.570 EPS + 3.917 PER + 468.786 PBV - 15,407.761 ROE + 64.398 CR + 387.895 DER + 1,415.335 RoCE

DISCUSSION

The Influence of Earning Per Share on Stock Prices

In the Table 2, EPS variable has a significant value of 0.000 which is smaller than 0.05. Therefore, EPS has a positive and significant influence on stock prices (H_I is supported). This means that the higher EPS, the higher stock prices will be. The higher EPS shows the better companies' capability in producing profit for the companies and the shareholders. This result is in line with the researches by Utami and Darmawan (2019), Cahyaningrum and Antikasari (2017), Astuty (2017), Asmirantho and Somantri (2017), and Idawati and Wahyudi (2015) in which EPS has a positive and significant influence on stock prices. However, the result is different from Gursida's research (2017) in which EPS has no influence on stock prices.

The Influence of Price to Earnings Ratio on Stock Prices

In the Table 2, PER variable has a significant value of 0.150 which is greater than 0.05. Therefore, PER has no significant influence on stock prices (H_2 is not supported). In this case, PER is not one of the factors considered by investors in their investment. The higher or the lower PER value does not influence investors' interest to invest in a company. This result is in line with the research by Herawati and Putra (2018) in which PER has no influence on stock prices. While Malhotra and Tandon (2013), Astuty (2017), Rahmadewi and Abundanti (2018) show different result in which PER has a positive influence on stock prices.

The Influence of Price to Book Value on Stock Prices

In the Table 2, PBV variable has a significant value of 0.000 which is smaller than 0.05. Therefore, PBV has a positive and significant influence on stock prices (H_3 is supported). The higher PBV value indicates that market value of the company is higher than the book value. Cahyaningrum and Antikasari (2017) show that companies that have good performances will have high PBV values which lead to higher PBV ratios. The increase in performance will be followed by the increase in stock prices due to the higher demand in stock. This result is in line with Astuty's research (2017) who finds that PBV has a positive influence on stock prices.

The Influence of Return on Equity on Stock Prices

In Table 2, ROE variable a beta value of -15407.761 with a significance of 0.000 < 0.05. This means ROE has a negative and significant influence (H_4 is supported). According to Cholidia (2017) as cited in Rahmadewi and Abundanti (2018), this negative influence is caused by investors is using reference groups, experiences and speculations instead of using fundamental analysis in investment decision making. This research is expected that the increase or the decrease in company returns is not necessarily influenced by the increase in stock prices. The increase in stock prices of retail companies is caused by the increase in companies' product demand in certain events such as Eid al-Fitr, Christmas, New Year, and when natural disasters hit several regions in which many consumers need the products. This result is different from the researches by Cahyaningrum and Antikasari (2017), Hadi and Nurhayati (2018) that state that ROE has a positive influence on stock prices. The result difference is happened because there are only two out of ten companies, ACES and LPPF that have ROE over 15 % for 4 years in a row. This means that most of the companies that are studied have poor performance in terms of ROE. This is in line with Sudiyatno and Suharmanto (2011) who find that ROE has a negative influence on stock return in the food and beverage industry in the IDX.

The Influence of Current Ratio on Stock Prices

In the Table 2, CR varible has a significance of 0.580 which is greater than 0.05. Therefore, H_5 which states that CR has an influence on stock prices is not supported. This means that investors do not consider the size of CR value when they making an investment decision. In addition, the information about current ratio issued once a year while stock prices value can be seen every day. This condition leads investors in this research, who are also market players in making investment decision, do not really pay too much attention to the impact of the capability of companies' liquidity (Pratama *et al.*, 2019). This research assumes that retail companies prioritize the availability of ready-to-sell goods rather than other current assets such as cash, receivables and short-term securities. The research result is in line with the researches by Guritno (2013), Asmirantho and Somantri (2017), Herawati and Putra (2018) that price to earnings ratio has no influence on stock prices. However, it is different from Gursida's research (2017) who find out that CR has a positive influence on stock prices.

The Influence of Debt to Equity Ratio on Stock Prices

In the Table 2, DER variable has a beta value of 352.696 with a significance of .048 which is smaller than 0.05. This means that DER has a positive and significant influence on stock prices so that H_6 is supported. Investors do not pay too much attention to the high debt ratio when investing because during 2014–2017, companies can still have a positive profit. This can be seen in eight of out ten companies' samples that have DER which is greater than 1. This means that the majority of companies have greater debts than the total equity. In this case, it can be assumed that even though companies have high debt ratio, they are still able to fulfill their responsibility to pay debts by producing profit annually. The researches by Asmirantho and Somantri (2017), Gursida (2017), and Herawati and Putra (2018) show that DER has no influence on stock prices.

The Influence of Return on Capital Employee on Stock Prices

In the Table 2, the significance of RoCE variable is 0.111 which is greater than 0.05. Therefore, H_7 stating that RoCE has a significant influence on stock prices is not supported. This means that investors do not consider RoCE when they investing. They tend to pay less attention to EBIT (Earning Before Interest and Taxes) but pay more attention to EAT (Earning After Tax) because it is relevant for them in terms of assessing shareholders' wealth and calculating dividends. In addition, EAT is also relevant as the indicator to assess companies' capability in producing profit. This research result is different from Sukhija's research (2014) in which RoCE is one of the factors influencing stock prices on IT and communication companies in India.

The Performance of Retail Sub-Sector Companies Based on Warren Buffett's Perspective

The result of multiple linear regression analysis shows that EPS, PBV, ROE, and DER have a significant influence on stock prices. The result of calculation of the four ratios in ten companies during the period of 2014–2017 is presented in the Table 3, 4, 5, and 6.

Table 3
EPS Calculation Result

Code		Year	•	
Code	2014	2015	2016	2017
ACES	32.44	34.51	41.69	45.62
AMRT	14.27	11.23	14.4	7.23
CSAP	36	14	21	19
ERAA	73	43	55	86
HERO	10.0	5.0	4.1	12.8
LPPF	486.5	610.5	692.4	653.8
MAPI	197	23	126	202
MIDI	48.09	48.75	68.01	35.67
RALS	50.12	47.64	60.02	60.48
TELE	50	52	66	57

According to Warren Buffett, ACES, ERAA, LPPF, MAPI, MIDI, RALS, and TELE are the companies that have good performance because their profit is stable and they have developed for four years in a row (Buffett & Clark, 2002).

Table 4 PBV Calculation Result

Code		Ye	ear	
Code	2014	2015	2016	2017
ACES	5.70	5.38	4.70	5.64
AMRT	0.010	0.005	0.005	0.005
CSAP	0.002	0.001	0.002	0.001
ERAA	1.05	0.49	0.51	0.58
HERO	0.002	0.006	0.008	0.006
LPPF	246.37	46.41	23.78	12.53
MAPI	0.000003	0.000002	0.000003	0.000002
MIDI	0.0027	0.003053	0.0026	0.0033
RALS	0.0017	0.0014	0.0025	0.0024
TELE	0.0026	0.0019	0.0019	0.0020

According to Warren Buffett, ACES is the company that has good performance because the PBV value > 1 (Buffett & Clark, 2002).

Table 5 ROE Calculation Result (in %)

Code -	Year			
	2014	2015	2016	2017
ACES	23.2	22.2	23.2	22.2
AMRT	19.16	11.49	11.86	5.7
CSAP	12.78	5.75	5.03	6.41
ERAA	7	7.17	7.68	9.37
HERO	0.8	2.47	2.54	7.7
LPPF	799.04	160.98	108.87	81.92
MAPI	2.81	1.01	6.51	8.25
MIDI	22.39	19.1	21.9	11.14
RALS	10.7	10.1	12.2	11.6
TELE	12,2	13.2	14.6	11.88

According to Warren Buffett, ACES and LPPF are the company that have good performance because the ROE value >= 15% and it is consistent (Buffett & Clark, 2002).

Table 6 DER Calculation Result

Code	Year				
Code	2014	2015	2016	2017	
ACES	0.25	0.24	0.22	0.26	
AMRT	3.67	2.13	2.68	3.17	
CSAP	3.04	3.13	2.00	2.37	
ERAA	1.03	1.43	1.18	1.39	
HERO	0.52	0.88	1.23	1.11	
LPPF	18.20	2.50	1.60	1.30	
MAPI	2.33	2.19	2.33	1.69	
MIDI	3.17	3.39	3.76	4.29	
RALS	0.37	0.37	0.39	0.40	
TELE	1.01	1.53	1.56	1.47	

According to Warren Buffett, ACES and TELE have good performance because they have capability in paying debts and their debt ratio is low in which DER value <=1 (Buffett & Clark, 2002).

Recommendations for Prospective Investors

The recommendations for prospective investors are based on four independent variables which significantly influences stock prices, namely EPS, PBV, ROE, and DER. The recommendations are presented in the Table 7.

Table 7
Shares Recommended for Purchase

Criteria			
Increasing EPS	Consistent ROE>=15%	PBV > 1	DER < 1
ACES	ACES	ACES	ACES
ERAA	LPPF		TELE
LPPF			
MAPI			
MIDI			
RALS			
TELE			

Based on the Table 7, ACES (Ace Hardware Indonesia Tbk) is the company that meets the four criteria set by Warren Buffett. Therefore, it is recommended to be bought by prospective investors.

CONCLUSION

Conclusion

- 1) EPS, PBV, ROE, and DER partially have significant effect to stock prices; while PER, CR and RoCE produce no significant effect to stock prices in retail companies in Indonesia.
- 2) ACES meets the four criteria for good company according to Warren Buffett The criteria are the company has EPS growth for four consecutive years, has ability to pay off debt, and has consistent ROE> = 15%.

Suggestion

Companies should maintain their good financial ratios, namely EPS continues to increase, ROE > 15%, DER < 1 and PBV > 1 to attract investors to invest in retail companies.

REFERENCES

- Allozi, N. M., & Obeidat, G. S. (2016). The relationship between the stock return and financial indicators (profitability, leverage): An empirical study on manufacturing companies listed in Amman Stock Exchange. *Journal of Social Sciences*, *5*(3), 408–424.
- Asmirantho, E., & Somantri, O. K. (2017). The effect of financial performance on stock price at pharmaceutical subsector company listed in Indonesia Stock Exchange. *Jurnal Ilmiah Akuntansi Fakultas Ekonomi*, *3*(2), 94–107.
- Astuty, P. (2017). The influence of fundamental factors and systematic risk to stock prices on companies listed in the Indonesian Stock Exchange. *European Research Studies Journal*, XX(4A), 230–240.
- Bella, A. (2018). *Aprindo: Ritel tutup bukan berarti mati*. Retrieved April 28, 2019, from http://marketeers.com/aprindo-ritel-tutup-bukan-berarti-mati/.
- Berman, B. R., Evans, J. R., & Chatterjee, P. M. (2018). *Retail management: A strategic approach*. Thirteenth Edition. Harlow: Pearson Education Limited.
- Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial management: Theory & Practice*. Fifteen Edition. Boston: South-Western College Publishing.
- Brigham, E. F., & Houston, J. F. (2018). *Dasar-dasar manajemen keuangan*. Edisi Empat Belas. Jakarta: Salemba Empat.
- Buffett, M., & Clark, D. (2002). The new buffettology. New York, NY: Rawson Associates.
- Cahyaningrum, Y. W., & Antikasari, T. W. (2017). Pengaruh earning per share, price to book value, return on asset, dan return on equity terhadap harga saham sektor keuangan. *Jurnal Economia*, *13*(2), 191–200.
- Choi N. Y., & Sias R. W. (2012). Why does financial strength forecast stock returns? Evidence from subsequent demand by institutional investors. *Review of Financial Studies*, 25(5), 1550–1587.
- Dita A. H., & Murtaqi I. (2014). The effect of next profit margin, price to book value and debt to equity ratio to stock return in the Indonesian consumer goods sector. *Journal of Business and Management*, 3(3), 305–315.
- Eduwinsah, N., & Sitorus, R. R. (2018). Analisis kinerja keuangan dan kinerja investasi terhadap kinerja portofolio saham serta tax planning sebagai variabel moderating. *Media Akuntansi Perpajakan*, *3*(1), 74–93.
- Fahmi, I. (2011). Analisis kinerja keuangan: Panduan bagi akademisi, manajer, dan investor untuk menilai dan menganalisis bisnis dari aspek keuangan. Bandung: Alfabeta.
- ----- (2014). Manajemen keuangan perusahaan dan pasar modal. Jakarta: Mitra Wacana Media.
- Fitriya. (2017). *Mengapa banyak 'department store' di Indonesia tutup?* Retrieved May 5, 2019, from https://www.cermati.com/artikel/mengapa-banyak-department-store-di-indonesia-tutup.
- Guritno, Y. (2013). Pengaruh financial ratio dan firm size terhadap financial distress serta return saham. *Business & Management Journal*, *10*(2), 127–138.
- Gursida, H. (2017). The influence of fundamental and macroeconomic analysis on stock price. *Jurnal Terapan Manajemen dan Bisnis*, *3*(2), 222–234.
- Hadi, W., & Nurhayati. (2018). analysis of the effect of net profit margin, return on assets and return on equity on stock price (Case study on consumption industrial sector companies listed in Indonesian Sharia Stock Index at Indonesia Stock Exchange in 2016), *The Management Journal of BINANIAGA*, 03(02), 81–92.
- Herawati, A., & Putra, A. S. (2018). The influence of fundamental analysis on stock prices: The case of food and beverage industries. *European Research Studies Journal*, *XXI*(3), 316–326.
- Idawati, W., & Wahyudi, A. (2015). Effect of earning per shares (EPS) and return on assets (ROA) against share price on coal mining company listed in Indonesia Stock Exchange. *Journal of Resources Development and Management*, 7, 79–91.

- Malhotra, N., & Tandon, K. (2013). Determinants of stock prices: Empirical evidence from NSE 100 companies. *International Journal of Research in Management & Technology (IJRMT)*, *3*(3), 86–95.
- Mangkuto, W. S. (2019). *Makin lesu, ada 4.300 gerai ritel bakal tutup di 2019*. Retrieved April 28, 2019, From https://www.cnbcindonesia.com/lifestyle/20190304163813-33-58793/makin-lesu-ada-4300-gerai-ritel-bakal-tutup-di-2019.
- Margrit, A. (2017). *Ritel di negara berkembang: Indonesia masuk 10 besar*. Retrieved May 4, 2019, from https://kalimantan.bisnis.com/read/20170606/448/659522/ritel-di-negara-berkembang-indonesia-masuk-10-besar.
- Morsy, A., & Rwegasira, K. (2010). Does demutualization matter to the financial performance of stock exchanges? An investigation of demutualized member stock exchanges of the world federation of exchanges. *International Research Journal of Finance and Economics*, 40, 155–167.
- Petcharabul P., & Romprasert S. (2014). Technology industry on financial ratios and stock returns. *Journal of Business and Economics*, 5(5), 739–746.
- Pratama, C. A., Azizah, D. F., & Nurlaily, F. (2019). Pengaruh return on equity (ROE), earning per share (EPS), current ratio (CR) dan debt to equity ratio (DER) terhadap harga saham. (Studi pada perusahaan Jakarta Islamic Index yang terdaftar di Bursa Efek Indonesia Tahun 2014–2017). *Jurnal Administrasi Bisnis* (JAB), 66(1), 10–17.
- Rahmadewi, P. W., & Abundanti, N. (2018). Pengaruh EPS, PER, CR, dan ROE terhadap harga saham di Bursa Efek Indonesia. *E-Jurnal Manajemen Unud*, 7(4), 2106–2133.
- Rigby, D. K. (2011). The future of shopping. *Harvard Business Review*, December 2011, 65–75. Retrieved from https://hbr.org/2011/12/the-future-of-shopping.
- Samsul, M. (2015). Pasar modal dan manajemen portofolio. Jakarta: Erlangga.
- Sudana, I. M. (2015). Teori dan praktik manajemen keuangan perusahaan. Jakarta: Erlangga.
- Sudiyatno, B., & Suharmanto, T. (2011). Kinerja keuangan konvensional, economic value added, dan return saham. *Jurnal Dinamika Manajemen*, 2(2), 153–161.
- Sugiyono. (2017). Metode penelitian bisnis: Pendekatan kuantitatif, kualitatif, kombinasi, dan R&D. Bandung: Alfabeta.
- Sukhija, S. (2014). An explicit model on fundamental factors affecting stock prices of bse listed companies in India: An inter industry approach. *European Journal of Business and Management*, 6(37), 196–202.
- Tim Sindonews. (2017). *Mendag: Kontribusi ritel pada perekonomian nasional makin besar*. Retrieved April 28, 2019, from https://ekbis.sindonews.com/read/1202726/34/mendag-kontribusi-ritel-pada-perekonomian-nasional-makin-besar-1493963949.
- Utami, M. R., & Darmawan, A. (2019). Effect of DER, ROA, ROE, EPS and MVA on stock prices in Sharia Indonesian Stock Index. *Journal of Applied Accounting and Taxation*, 4(1), 15–22.

THE EFFECT OF ERP PRACTICE, SCM PRACTICE, TO PRODUCTION PERFORMANCE WITH IT INFRASTRUCTURE AS A MODERATING

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ABSTRACT

Information technology is a system that is used by many companies to unite many business function systems within the companies. The integrated information technology used by those companies is called Enterprise Resources Planning (ERP). The practice of ERP usage by companies is to obtain integrated data system among departments. The ERP practice must be aligned with the company operational system and must be customized for regular updates. This research distributes 74 questionnaires to manufacturing companies that main system is using ERP, with nine questionnaires rejected by the respondents due to company confidentiality, and 63 questionnaires are valid for further data process and analysis with PLS. ERP practice can increase SCM practice, and improve production performance of manufacturing companies. As an intervening variable, IT infrastructure upgrade can increase the effect of ERP practice to SCM practice because the information quality can become valuable information sharing for supply chain partners. The upgraded IT can increase the effect of ERP practice to production performance because it helps management to make proper decisions.

Keywords: ERP practice, SCM practice, production performance, IT infrastructure.

INTRODUCTION

The manufacturing companies must build their competitive advantage through the company strategy. The strategy must be able to create uniqueness that is not possessed by competitors. In the global market, the creation of strategy to respond the market and to innovate is very valuable for business capability, especially in facing severe competition marked by the increasing challenges of fast changing consumer preferences and shorter product life cycle (Chen, 2018). Since globalization has caused many alterations in business strategies, the direct impacts of globalization to business environment lately affect product processes, product packaging, product assembly, product storage and sales, and distribution across international borders and continents (Arlbjørn & Lüthje, 2012). Several push factors include cost reduction, company responding speed, increasing product quality and production flexibility, and reduced cycle times. This push factors are crucial for global competition (Arlbjørn & Lüthje, 2012).

Production process is very vital for business sustainability, especially for manufacturing companies. Without efficient and effective processes, manufacturing companies cannot grow and excel in global markets. Therefore, the manufacturing companies have to pay attention to their processes, especially the production methods, which contain competitive advantages for the company's sustainability. The manufacturing processes, which are focused on the production performance, are intended to yield efficient and effective production processes. The production performance in most manufacturing companies is connected to the production capacity, efficient production material use, efficient human resource use, and efficient energy use as the overhead costs.

To reach optimal production performance, manufacturing companies have to connect the SCM practice with other production activities. The SCM practice in a company is often reflected in the organization culture, customer relationship, information and communication technology, benchmarking, company performance measurement, and lean manufacturing. Proper SCM practice will increase company performance. In the production department, SCM practice is conducted by removing any obstacles that offer no significant added value to the company, implementing just in time management to the production to make proper amount of goods in time, implementing agile manufacturing (Gorane & Kant, 2016), and implementing information technology in the company (AL-Shboul, Garza-Reyes, & Kumar, 2018).

The implementation of SCM is always related to the role of information technology usage of a company. Many manufacturing companies have implemented the information technology system that can integrate data in the real time, and that system is called ERP (Enterprise Resource Planning). The ERP practice is used by manufacturing companies to create production schedules of each finished products for each machinery daily and weekly, making material planning to prepare material for each production process which are matched with the schedules, controlling work in process (WIP) in the production floor to match with the inventory, conducting data entry in the production

department and reporting them for the costing needs of the accounting and finance department, transferring goods data from the production floor to the inventory to the finished good sections which are monitored by the ERP system.

The SCM practice and ERP practice in increasing the company performance must be supported by information technology that is possessed by the company in order to create benefits from both systems. SCM is a strategy used by a company to connect customers with suppliers to control information flows, goods distribution, and appropriate fund distribution. The integration between a company with internal and external sides is always needed (Hamister, 2012). The integration can happen with the help of information technology which unites all related departments such as the production department, finance department, accounting department, marketing department, and other cross functional department within the company. With the help of information technology, ERP practice assists to achieve and implement SCM practice. The use of information technology in a company relies on the continually upgraded information technology infrastructure. Adjusting the information infrastructure technology is closely related with the software and hard ware upgrades of the information technology. The newness of this research relies on the limited numbers of researches on the field of information technology upgrade adjustment to the SCM practice supported by the ERP practice in manicuring companies in Indonesia. There is also a few researches that discusses about the whole package of information technology infrastructure used in a company to improve production performance.

GRAND THEORY

Supply Chain Management (SCM) Practice

The SCM practice is defined as a chain of activities done by an organization to promote effective supply chain management. A research by Gawankar, Kamble, and Raut (2017) explores various SCM practice, such as customer relationship management, strategic supplier partnership, information sharing, information quality, lean retailing practises, and postponement practises. The SCM practice will bring impacts on the effective and efficient company performance. The SCM practice is to conduct active communication on supply chain flows, to manage compatible information exchange on supply chain flows, to communicate company development along supply chain flows, and to build strong teams across organization within supply chain flows (Hsu, Tan, & Laosirihongthong, 2014).

SCM practice that is proposed by AL-Shboul *et al.* (2018) exploring the SCM performance is about doing collaboration with supplier, controlling flexibility with company external sides, using internet for a company to gain internal access to various departments and external access to suppliers and customers, focusing on customers to maintain product loyalty, reducing company wastes through lean production, and integrate various across functional departments to form an internal integration. Chong, Chan, Ooi, & Sim, (2011) claim that SCM practices cover the area of strategic partnership with suppliers, good relationship building with customers, information sharing with partners, and usage of information technology for training and best internal operation. SCM practice becomes the best practice given to a company through SCM activities related to the departments of purchasing, production, logistics, and transportation. The indicators for the SCM practice variable are schedule production, integrated system, cross functional department, information quality, collaboration with suppliers, and coordination with customers.

Enterprise Resources Planning (ERP) Practice

Enterprise resources planning is cross functional integration in a company to unite data to become a single data base. A company uses ERP to facilitate its resource setting. ERP practice gives the exact information to key user and end user in their activity. ERP practice is able to be used by the management to coordinate and control the company operational to produce the effectivity and efficiency of Critical Success Factor (CSF) in implementing ERP. They are project team, top management involvement, strategic decision making, communication, project management, project support, minimum customization, organizational change management, business process alignment, software testing, performance measurement, education and training, technical possibilities (Reitsma & Hilletofth, 2018). According to Dezdar (2012), CSF is divided into two in implementing ERP, they are strategic success factor (top management support, project management, business process engineering) and tactical success factor (ERP vendor support, user training and education, enterprises wide communication). ERP practice that is used by a company to control and organize its activity related to its information technology.

A company uses ERP practice by building modules of each function as its needs such as module for sales and distribution, module for management material, module for procurement and analysis, module for production and control system, module for costing, module for finance, module for shop floor control system, module for human resource management, etc. ERP practice is used to give information to user, key user and management for them to see the condition of their company appropriately and it will give them to make decision appropriately. Indicator used in measuring ERP practice is alignment ERP system with operational system, customization ERP system, training key user and system development.

Information Technology Infrastructure

The fast changing information technology implementation in a manufacturing company starts with an implementation in a department to know all work activities of the unit function. The integration is first built from accounting system in the company and in controlling the warehouse. The next change is that the company is building the integrated cross functional in a company by implementing the integrated information technology called enterprise resources planning (ERP). Using ERP is able to improve the company by producing operational system effectively and efficiently. The next changing is by external participation to be included in the information system of the company. The company integrates the internal and external to make the integration data with the suppliers and customers. The integrated data between a company and customer in a supply chain stream management is called supply chain integration (Sundram, Bahrin, Munir, & Zolait, 2018).

The changes in a company should be supported by the use of information technology infrastructure. The company should upgrade the information technology software and hardware. Information technology capability can be reached if the company provide fund for information technology infrastructure upgrade to fit its needs such as in using automated data entry in the company's business process by using data capturing machine to replace human work (Chae, Koh, & Park, 2018). The architecture of information and communication technology (ICT) is divided into hard and soft (human) system (Huang, Gardner, & Moayer, 2016). Hard system is an information technology hardware related to network system, computer system, data base system and data processing system (Skotnes, 2015). On the other hand, soft system is related with knowledge system and all of the work of human competency. Indicators used in information technology infrastructure are the company fund to improve it, hardware upgrading as needed, software upgraded as needed and improving the employees' competency to use it.

Production Performance

The measurement of a company performance should be done continuously to improve in the operational area. The company operational is a process to produce the products from accepting customer order to the execution of production plan and the procurement of goods from supplier. The company gives efforts to build the good partnership with the supplier and customer. The company performance is determined from the non-financial and financial performance (Ya'kob & Jusoh, 2016). Tarigan (2018) states that operational performance can be measured by fulfillment of customer order, the accuracy of shipping according to the time that has been set, delivery flexibility, and company flexibility to production volume change. Sundram *et al.* (2018) say in the research that manufacturing performance is measured by the settling of the complaints from customer, the speed of order fulfillment, delivery due date and flexibility. Chae *et al.* (2018) states that business performance that is measured by its financial performance is measured from profit ratio and cost ratio. Production performance measured in this research is order fulfillment (Tarigan, 2018; Sundram *et al.*, 2018), delivery due date (Sundram *et al.*, 2018), delivery flexibility (Tarigan, 2018; Sundram *et al.*, 2018), quality product and capacity production.

The Relationship among Research Concepts

Business performance can be improved when companies can maintain sustainable business through sustainable SCM. Sustainable supply chain management (SSCM) is a simple relationship between supply chains of a business where three factors, namely economic, environmental, and social are considered in their operations. Coordinated relations between organizations in business where economic, environmental and social factors are considered to manage raw materials, information, capital flows are designed efficiently and effectively related to the procurement, production and distribution of services to meet stakeholder demand, increase profitability, competitiveness, and organizational sustainability (Ahi & Searcy, 2013). The results of this sustainable will provide increased supply chain management performance in increasing the efficiency and effectiveness of the company. This condition is obtained when the company is always able to run and implement SCM practice properly. SCM practice in companies can be quantitative and qualitative performance (Gandhi, Shaikh, & Sheorey, 2017).

Supply chain management practices have an impact on improving company performance. The company makes improvements in collaborating with customers and suppliers as one of the practical forms of SCM in improving company performance in the market share of performance and financial performance (AL-Shboul *et al.*, 2018). SCM practice in the company will improve organizational performance and innovation performance of the company because good internal operation and customer relationships will provide innovation for new products for the company. SCM practice also has an impact on organizational performance in reducing production costs in industries in Malaysia (Chong *et al.*, 2011).

SCM practice will make the process in the company efficient and effective in producing products with the help of information technology that is implemented (Devaraj, Krajewski, & Wei, 2007). Companies that have strong internal resources with adequate infrastructure support will have a strong supply chain position and have opportunities to improve company performance (Hsu *et al.*, 2014). SCM practice for companies is supported by a strong operational system through a well-functioning production system. Based on this explanation, conceptual research models can be formulated (Figure 1).

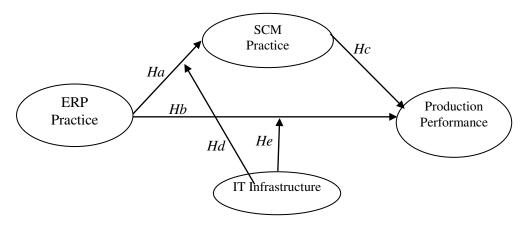


Figure 1. Conceptual framework ERP and SCM practice, production performance, IT infrastructure

Based on Figure 1, the research hypothesis can be constructed as follow:

Ha: ERP practice affects SCM practice in manufacturing companies.

Hb: ERP practice affects production performance in manufacturing companies.

Hc: SCM practice affects production performance.

Hd: ERP practice affects SCM practice in manufacturing companies with IT infrastructure as the moderating variable.

He: ERP practice affects production performance in manufacturing companies with IT infrastructure as the moderating variable.

RESEARCH METHOD

East Java is one of the largest provinces in Indonesia with the largest contribution to economic growth above Indonesia's national growth average. Indonesia's economic growth is 5.07% and the biggest contribution comes from Java Island at 5.66%. The economic growth of East Java is the largest compared to other provinces in Java island, with the main contribution from manufacturing industries amounting to (Prasetyo, 2019). Data retrieval from companies is done by visiting the company with the help of students as a data collection team. The questionnaires distributed were 74 questionnaires and 9 of the respondents refused to fill out questionnaires, but one questionnaire was not filled in completely. The total questionnaires that can be processed using PLS (Partial Least Square) analysis are 64 questionnaires. The results of data processing with PLS is to obtain a research model and to answer the research hypothesis

ANALYSIS AND DISCUSSION

This research focuses on the manufacturing companies in East Java that are obtained from the website of the Ministry of Industry. After the targeted companies are selected, the companies are contacted to make some appointments for interviews with the representatives of the companies, especially from the level of supervisor,

middle manager, head of department, or director. After some company visits and interviews, there are 64 company representatives willing to be the research respondents by filling the questionnaires for further data collection. The data are processed by PLS to obtain convergent validity and composite reliability.

Validity test is obtained by loading factor score. If the score is above 0.50, the validity can be accepted. The research instrument is reliable if the value is above 0.70. Based on the results of data processing, the reliability value of the ERP practice variable is 0.869, the SCM practice variable is 0.845, the production performance variable is 0.868, and the IT infrastructure variable is 0.925. The results of the obtained reliability values are above 0.70; so, the instrument is reliable. It is also supported by the Cronbach's Alpha values for each variable, with the ERP practice of 0.798, the SCM practice of 0.829, the production performance of 0.851 and the IT infrastructure of 0.891; so that it can be said that all variables have met the reliability requirements

The results of data processing show that the validity values which are indicated by the loading factor scores for all measurement items are above 0.5. For the variable of ERP practice, the indicator of the ERP system alignment to the operational system (ERP 1) is of 0.766, the ERP system customization (ERP2) is of 0.855, the key user training (ERP3) is of 0.803, and the system development (ERP4) is of 0.730. The SCM practice variable contains some indicators of the schedule production (SCM1) with the value of 0.625, the integrated system (SCM2) of 0.697, the cross functional department (SCM3) of 0.831, the information quality (SCM4) of 0.609, the collaboration with suppliers (SCM5) of 0.851, and the coordination with customers (SCM6) 0.785. For the value of loading factors of the variable information technology infrastructure, the indicator of the company fund to improve it (IT1) is of 0.734, the hardware upgrading as needed (IT2) is of 0.922, the upgraded software as needed (IT3) is 0.931, and the improvement of the employees' competency to use it (IT4) is of 0.876. Finally, the variable of the production performance surrenders the loading factor value for each indicator of the order fulfillment (PP1) of 0.820, the delivery due date (PP2) of 0.853, the delivery flexibility (PP3) of 0.695, the quality product (PP4) of 0.742, and the capacity production (PP5) of 0.842. Based on the results above, all research variables are valid and research instruments are reliable. The PLS output the data processing for the path coefficient to calculate the significancy of the impacts and to test the research hypothesis is observed in Table 1.

Table 1
Direct and Moderating Coefficient for Path Coefficient

Direct and Moderating Coefficient	Original Sample (O)	T Statistics ([O/STDEV])	P Values
ERP Practices -> Production Performance	0.547	5.329	0.000
ERP Practices -> SCM Practices	0.818	14.726	0.000
IT Infrastructure -> Production Performance	0.017	0.261	0.794
IT Infrastructure -> SCM Practices	0.298	3.544	0.000
Moderating Effect 1 -> SCM Practices	0.184	2.005	0.045
Moderating Effect 2 -> Production Performance	0.127	2.327	0.020
SCM Practices -> Production Performance	0.361	3.685	0.000

In Table 1, the value of the impact from ERP practice to SCM practice is obtained the path coefficient of 0.818 with the *p-value* of 0.000, so the first hypothesis is accepted as the *p-value* is smaller than 0.05. It can be said that ERP practice implemented by the company is able to improve SCM performance. This condition provides that the ERP implementation of the company to integrate the internal company can be used also in carrying out internal and external integration of the company. SCM practice can be improved with the presence of ERP practices for companies. This study supports the results of the study (Gorane & Kant, 2016) stating that ERP software is able to provide quality data to SC partner so as to provide a broader scale of economics to increase invoicing, increase services and increase competitiveness.

Table 1 also reveals the path coefficient of 0.547 with *p-value* of 0.000 for ERP practice to production performance, so the second hypothesis is also accepted as the *p-value* is smaller than 0.05. It is said that ERP practice in manufacturing companies in East Java is able to provide improved production performance. Company management, key users and end users can use ERP practice in coordinating and communicating between functions to make the right decisions. Joint decisions taken are able to provide improved performance for the company. This study is in accordance with the results of the study by Devaraj *et al.* (2007).

The next hypothesis is that SCM practice gives an effect on production performance with the path coefficient value of 0.361 and the *p-value* of 0.000, so the third hypothesis can be accepted. SCM practice that is used by companies in managing relationships with suppliers and customers is able to provide an increase in the company's production performance. This research is in accordance with the results of the study by AL-Shboul *et al.* (2018) which states SCM practice enabling to improve the company performance in terms of the financial performance and market share performance.

IT infrastructure as a moderating variable in ERP Practice has an influence on SCM practice in manufacturing companies. Table 1 shows that the p-value 0.045 is below 0.05, therefore, IT infrastructure is capable of being a moderating variable of ERP practice to SCM performance with the path coefficient value of 0.184. ERP practice in providing data integration within the company is used to generate supply chain practice in the form of information quality and information sharing between cross functional to be able to improve the performance of SCM companies (Sundram *et al.*, 2018; and AL-Shboul *et al.*, 2018).

IT infrastructure as a moderating variable in ERP Practice has an influence on production performance in manufacturing companies. Table 1 shows that the p-value of 0.020 is below 0.05; so, information technology infrastructure is capable to act as a moderating variable on ERP Practice to production performance of 0.127. This study supports a research of Gorane and Kant (2016), which states the availability of information technology capable of integrating such as ERP software becoming very important for the company. Information technology and communication manufacturing companies are able to produce effective and efficient business transactions, quick access to information, enable better customer service, reduce manual documents for companies, improve coordination and better communication, increase company productivity, and save time.

CONCLUSION

The results from the data process, it can be concluded that ERP practice can provided integrated technology which improves the supply chain practice. ERP practice in East Java manufacturing companies can provide information about order fulfillment and delivery due date through ERP system which can surrender efficiency and effectiveness on production performance. SCM practice can create quality information and collaboration with suppliers and customers so that it can improve the delivery flexibility and product quality of the production performance. IT infrastructure can bring effects to increase ERP practice toward SCM practice as the ERP practice can integrate company data so that information quality and information sharing can be done with business partners. Finally, IT infrastructure can bring significant effects of ERP practice to production performance as the management can obtain information on order fulfillment, due date data order, and production capacity in order to make proper decision, which in the end can improve company performance.

REFERENCES

- AL-Shboul, M. A., Garza-Reyes, J. A., & Kumar, V. (2018). Best supply chain management practices and high-performance firms: The case of gulf manufacturing firms. *International Journal of Productivity and Performance Management*, 67(9), 1482–1509.
- Ahi, P., & Searcy, C. (2013). A comparative literature analysis of definitions for green and sustainable supply chain management. *Journal of Cleaner Production*, *52*, 329–341.
- Arlbjørn, J. S., & Lüthje, T. (2012). Global operations and their interaction with supply chain performance. *Industrial Management & Data Systems*, 112(7), 1044–1064.
- Chae, H-C., Koh, C. E., & Park, K. O. (2018). Information technology capability and firm performance: Role of industry. *Information and Management*, *55*(5), 525–546.
- Chen, C. J. (2018). Developing a model for supply chain agility and innovativeness to enhance firms' competitive advantage. *Management Decision*. doi:10.1108/MD-12-2017-1236.
- Chong, A. Y. L., Chan, F. T. S., Ooi, K. B., & Sim, J. J. (2011). Can Malaysian firms improve organizational/innovation performance via SCM? *Industrial Management & Data Systems*, 111 (3), 410–431.
- Devaraj, S., Krajewski, L., & Wei, J. C. (2007). Impact of e-business technologies on operational performance: The role of production information integration in the supply chain. *Journal of Operations Management*, 25(6), 1199–1216.
- Dezdar, S. (2012). Strategic and tactical factors for successful ERP projects: Insights from an Asian country. *Management Research Review*, *35*(11), 1070–1087.

- Gandhi, A. V., Shaikh, A., & Sheorey, P. A. (2017). Impact of supply chain management practices on firm performance: Empirical evidence from a developing country. *International Journal of Retail & Distribution Management*, 45(4), 366–384.
- Gawankar, S. A., Kamble, S., & Raut, R. (2017). An investigation of the relationship between supply chain management practices (SCMP) on supply chain performance measurement (SCPM) of Indian retail chain using SEM. *Benchmarking: An International Journal*, 24(1), 257–295.
- Gorane, S. J., & Kant, R. (2016). Supply chain practices: An implementation status in Indian manufacturing organisations. *Benchmarking: An International Journal*, 23(5), 1076–1110.
- Hamister, J. W. (2012). Supply chain management practices in small retailers. *International Journal of Retail & Distribution Management*, 40(6), 427–450.
- Hsu, C-C., Tan, K. C., & Laosirihongthong, T. (2014). Antecedents of SCM practices in ASEAN automotive industry: Corporate entrepreneurship, social capital, and resource-based perspectives. *The International Journal of Logistics Management*, 25(2), 334–357.
- Huang, F., Gardner, S., & Moayer, S. (2016). Towards a framework for strategic knowledge management practice: Integrating soft and hard systems for competitive advantage. *VINE Journal of Information and Knowledge Management Systems*, 46(4), 492–507.
- Prasetyo, A. (2019). Jawa kontributor terbesar bagi pertumbuhan eknomi nasional. *Media Indonesia*, senin, 6 mei 2019. https://mediaindonesia.com/read/detail/233732.
- Reitsma, E., & Hilletofth, P. (2018). Critical success factors for ERP system implementation: A user perspective. *European Business Review*, *30*(3), 285–310.
- Sundram, V. P. K., Bahrin, A. S., Munir, Z. B. A., & Zolait, A. H. (2018). The effect of supply chain information management and information system infrastructure: The mediating role of supply chain integration towards manufacturing performance in Malaysia. *Journal of Enterprise Information Management*, 31(5), 751–770.
- Skotnes, R. Ø. (2015). Management commitment and awareness creation ICT safety and security in electric power supply network companies. *Information & Computer Security*, 23(3), 302–316.
- Tarigan, Z. J. H. (2018). The impact of organization commitment to process and product innovation in improving operational performance. *International Journal of Business and Society*, 19(2), 335–346.
- Ya'kob, S. A., & Jusoh, W. J. W. (2016). The effect of supply chain linkage on micro and small enterprises' performance. *International Journal of Business and Society*, 17(1), 99–112.

THE EFFECT OF ENTERPRISE RESOURCE PLANNING ON COMPETITIVE ADVANTAGE THROUGH SUPPLIER RELATIONSHIP MANAGEMENT

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ABSTRACT

This study examines the effect of enterprise resource planning (ERP) system on the competitive advantage with the mediating role of supplier relationship management. The study used 59 samples from the executive level of the export-oriented manufacturer in the region of East Java, Indonesia. Data collection used questionnaires designed with a five-point Likert scale. Data analysis used the partial least square technique with smartPLS software. The empirical study result revealed that the ERP system used by the corporate affects the improvement of the supplier relationship management significantly. The ERP system used by the company has a direct impact on strengthening its competitive advantage. Furthermore, supplier relationship management also affects the competitive advantage directly and significantly. To sum up, the ERP system significantly influences the competitive advantage, directly and indirectly, as indicated by the path coefficient of 0.865. A new finding suggests that supplier relationship management mediates the effect of ERP on a competitive advantage. These results provide a significant contribution to the supply chain theory and practice. The export-oriented manufacturer, therefore, may refer to this result in enhancing the competitive advantage.

Keywords: Enterprise resource planning, competitive advantage, supplier relationship management.

INTRODUCTION

In recent years, there has been an increasing interest in the role of supply chain management in enhancing the competitive advantage of an organization. The reason is that the organization should go international for either acquiring raw materials or selling their finished product. The supply chain management, consequently, plays an essential role in achieving superior competitive advantages in terms of lower cost, shorter lead-time, and higher quality. The supply chain management also becomes more complicated due to the broader coverage regarding the geographical location and the culture of the organization involved in the network. The export-oriented manufacturer domiciled in the region of East Java, Indonesia, are also facing the same constraint as they are looking for imported raw materials. In the context of the supply chain management, many studies suggested several factors which contributed to enhancing the competitive advantages of an organization such as the implementation of enterprise resource planning (ERP) system and the establishment of the supplier relationship management (SRM).

Many researchers have examined that ERP system has an impact on the competitive advantage (Abdelghaffar, 2012; Bin Che Rose, 2009; Egdair, Rajemi, & Nadarajan, 2015; Hidayat & Akhmad, 2016; Hsu & Chen, 2004; Li & Lin, 2006; Prasojo, 2015). The ERP system can provide integrated information and a more efficient administrative system for the company. ERP system enables the organization to integrate the related units in such a way that that the process becomes more efficient and has a shorter lead-time and faster new products development than that carried out by the competitor. The studies also have been conducted over a different sector of industry and countries, and they have a conclusion in common that ERP creates and enhances the competitive advantage.

Other researchers also reveal that supplier relationship management (SRM) affects the competitive advantage of an organization (Cousineau, Lauer, & Peacock, 2004; Jap, 2001; Thatte, 2007). Those researchers indicate that SRM plays an essential role in cost reduction and creates a competitive advantage for the companies. The manufacturer enjoys the benefits from the relationship, such as having a shorter lead time, lower cost, and higher quality. Therefore, it is essential for a manufacturer to establish an excellent relationship with suppliers.

Furthermore, it is also found from the literature review that the ERP system also influences the SRM. The use of ERP in SRM can lower production costs and produce higher product quality. An appropriate relationship with suppliers supported by ERP systems will be highly helpful in improving the competitive advantage (Al-Abdallah, Abdallah, & Hamdan, 2014; Larson & Kulchitsky, 2000). All previous studies have primarily concentrated on the direct impact of the ERP system and SRM on the competitive advantage of an organization. However, to the best of the author's knowledge, there is no study presenting the mediating role of the SRM over ERP system and

competitive advantage relationship. This study is intended to fill this gap, i.e., to examines the influence of ERP on the competitive advantage with the mediating role of the SRM. This paper consequently raises four research questions as follows: first, whether ERP system affects competitive advantage; second, whether SRM influences competitive advantage; third, whether ERP system affects SRM; and fourth, whether SRM has a mediating effect on ERP system and competitive advantage relationship.

LITERATURE REVIEW AND HYPOTHESIS

ERP and Competitive Advantage

The use of ERP system aims to integrate business processes through the support of integrated computer information systems. This system allows companies to standardize the flow of management information. The ERP system used internet technology, which enables the integration of the internal information flows and business process as well as external information from customers and suppliers. In the case of large manufacturing companies, ERP implementation requires the integration of many short of data to allow quick and proper decision-making. Competitive advantage is defined as the application of the strategy that creates a superior value not owned by current competitors or potential competitors (Saeidi et al., 2019). Other study defines the competitive advantages of an organization as the extent to which a company can create a superior sustainable position against its competitors (McGinnis & Vallopra, 1999). A company has a competitive advantage if the company implements the appropriate strategy that creates value that is not owned by anyone else, including its competitors (Clulow, Gerstman, & Barry, 2003). The indicators of competitive advantage (Li, Ragu-Nathan, Ragu-Nathan, & Subba Rao, 2006) consist of price, quality, delivery capability, product innovation, and time to market. The ERP system aims to integrate business processes through the support of an integrated computer information system (O'Brien, & Marakas, 2007). ERP uses internet technology to integrate information flows and internal business functions as well as information from customers and suppliers. The ERP system adoption by large manufacturing companies needs integration of work practices and information systems (Tarigan, Lianto & Basana, 2019). The ERP is measured in term of the accuracy of the information, quality of the information, easiness to use, easiness to understand, user satisfaction, frequent usage, and enhancement in overall efficiency (Jenatabadi, Hui, Ismail, Binti Mohd Satar, & bt Wan Mohamed Radzi, 2013).

Research by Egdair *et al.* (2015) proves that the ERP system affects the current organization performance in the Middle East and South Africa, notably Libya, where competitive advantage becomes one dimension of the organization performance. The other study conducted by Abdelghaffar, (2012) focuses on the success factors for ERP implementation in large organizations in Egypt which indicate that the implementation of the ERP system has a direct influence in increasing the competitive advantage. For the company which wants to create a competitive advantage; it is necessary to use the ERP system in the business process (Prasojo, 2015). According to Bin Che Rose (2009), an ERP system produces accurate information and can help companies adapt to existing changes and create competitive advantage. According to Hsu & Chen (2004), ERP systems can help improve overall business performance that results in a competitive advantage and increase long-term profitability. The first hypotheses, therefore, is proposed as follows:

 H_1 : ERP system influence the competitive advantage

ERP and SRM

The use of ERP in SRM can lower production costs and produce higher product quality (*Al-Abdallah et al.*, 2014). An appropriate relationship with suppliers supported by ERP systems is highly helpful for export-oriented manufacturing. Supply chain practices may involve two or more partners from different countries, and they need proper information sharing among parties. This sharing of information is not affordable to implement without ERP in place. Reference (Yu, Yan, & Edwin Cheng, 2001) argues that the benefits of SRM depend on the extent to which the information is shared. Another research by (Larson & Kulchitsky, 2000) explains that lead-time, which is one of the dimensions of SRM, is influenced by the quality of information generated by the ERP. According to (Al-Abdallah *et al.*, 2014), the use of ERP in SRM can lower production costs and produce higher product quality. Based on this review, the second hypothesis is as follows:

 H_2 : ERP system affects SRM

SRM and Competitive Advantage

SRM is a systematic process to monitor and access the capabilities of suppliers in supporting the company's overall business strategy, particularly in creating the value for the company. The company establishes the SRM for the reason of enhancing the efficiency of the process and enforcement of the company policy through the purchasing

strategy in cooperation with the supplier. SRM provides access to the supplier base to help companies improve the business value that ultimately enhances the company's competitiveness. SRM has long-term goals and short-term goals. Long-term goals include creating value for customers, increasing profits, improving the efficiency of production operations, and increasing markets (Williams, 2006). On the other hand, short-term goals include increasing productivity, reducing cycle times, and reducing inventories (Wisner & Tan, 2000). According to Al-Abdallah *et al.*, (2014), the SRM indicator is divided into five dimensions, namely: supplier quality improvement, supplier-based trust, production time reduction, supplier collaboration in new product development, and partnership or development with suppliers. SRM can also influence the competitive advantage of export companies. The firm needs to establish a proper relationship with suppliers. It is also supported by Cousineau *et al.* (2004) who mentioned that the relationship of cooperation between suppliers and companies could be a strategy for increasing the competitive advantage of a company. Thatte (2007) also explained that supplier relationships with companies create competitive advantages that result in profitability and differentiation for the company. Thus, the third hypothesis is as follow: H_3 : Supplier relationship management affects competitive advantage

The Mediating Role of SRM over the ERP System and Competitive Advantage Relationship

SRM allows both parties, buyer, and supplier, to cooperate in a mutually beneficial way. They gain benefits because they support each other in term of their respective goals. The cooperation between buyer and supplier need information sharing, which enables both parties to understand their partner requirement. As discussed previously, the ERP system supports the establishment of supplier relationship by connecting both sides to the same information, which means that the ERP system affects the SRM (Al-Abdallah *et al.*, 2014; Larson & Kulchitsky, 2000; Yu *et al.*, 2001). Similarly, SRM provides the benefit to a buyer in term of lower cost, better quality, and shorter time delivery, which at the end enhances a competitive advantage of the organization. By looking at these two relationships together, it can be concluded that ERP influences the SRM and subsequently affects the competitive advantage. Concerning this discussion, it can be postulated that SRM mediates the relationship between ERP system and competitive advantage. The following last hypotheses are proposed:

 H_4 : SRM mediates the effect of ERP on competitive advantage

RESEARCH METHOD

Sampling and Data Collection

The population of this study is 63 export-oriented manufacturers located in the region of East Java, Indonesia. Of the 63, 43 manufacturers are public or listed, while the rest, 20 firms, are private or unlisted. Those firms were interviewed by using a self-administered questionnaire, and each firm was represented by one respondent from top management levels, such as CEO or General Manager as they are considered to be the most knowledgeable persons of their firm. An interview and discussion were conducted with particular respondents when considered necessary. The questionnaire was designed using subjective assessment with a five-point Likert scale. From 63 firms, 59 have correctly completed the questionnaires representing a response rate of 93.6%. Data were analyzed using Partial least square (PLS) technique using smartPLS software ver.3.0 to analyze the data. PLS is an appropriate tool for analyzing the data mainly in the case of small sample size [21, 22] and limited theoretical knowledge (Moreno & Casillas, 2008).

Operational Definition of the Constructs

This study assesses three constructs using the definition proposed by previous researchers. The ERP measures the extent to which the system provides the information to the user. Seven indicators are used, i.e., 1) accuracy of information, 2) quality of information, 3) easiness to use, 4) frequency used to retrieve the information, and 5) satisfaction of the user in respect to the information obtained, 6) easiness to understand the information received, and 7) increased overall efficiency. SRM measures the extent to which the supplier gives benefits to the firm by assessing whether supplier: 1) participates in increasing productivity, 2) reduces the production cost, 3) believes the firm upon what has been promised; 4) delivers the part quickly, 5) engages in new product development, and 6) has a mutually beneficial long-term relationship. Finally, competitive advantage measures the competitiveness of the manufacturer by assessing the extent to which the firm: 1) provides products at competitive prices, 2) produces products with superior quality, 3) delivers products promptly, 4) introduces new products to the customer's needs, and 5) introduces new products faster than competitors.

FINDINGS

The first analysis is to assess the measurement model by evaluating the convergent and discriminant validity of each indicator and the reliability of the block indicators of each variable

Table 1 Measurement model assessment

Construct and Indicator	Factor loading -	Cross loading			C/D	Dl
		ERP	SRM	CA	C/R	Remark
Enterprise Resource Planning (ERP)						
The accuracy of information (ERP1)	0.684		0.449	0.603		
Quality of information (ERP2)	0.712		0.511	0.639		
Easy to use (ERP3)	0.718		0.646	0.653		Valid and reliable
Frequent usage (ERP4)	0.779		0.540	0.697	0.844	
The satisfaction of user (ERP5)	0.633		0.507	0.507		
Easy to understand (ERP6)	0.634		0.586	0.575		
Increase overall efficiency (ERP7)	0.886		0.682	0.694		
Supplier Relationship Management (SRM)						
Increase productivity (SRM1)	0.838	0.506		0.560		
Reduce the production cost (SRM2)	0.655	0.590		0.615		Valid and
Believe upon the manufacturer promise (SRM3)	0.682	0.611		0.575	0.885	reliable
Deliver the order quickly (SRM4)	0.766	0.571		0.575		
Engage in new product development (SRM5)	0.702	0.544		0.572		
Competitive Advantage (CA)						
Provide product at competitive prices (CA1)	0.627	0.694	0.560			
Produce product with superior quality (CA2)	0.673	0.580	0.615		0.881	Valid and reliable
Deliver product promptly (CA3)	0.780	0.620	0.575			
Introduce product to customer need (CA4)	0.813	0.591	0.575			TCHAUIC
Introduce new product faster than competitor (CA5)	0.699	0.608	0.572			

Table 1 shows the result of measurement model assessment. All indicators are considered valid concerning convergent validity as the factor loading of each indicator exceeds the acceptable minimum value of 0.50 (Hair, Sarstedt, Hopkins, & Kuppelweiser, 2014). The indicators are also considered valid in respect of discriminant validity as the cross-loadings indicate that the loading of each indicator with its construct is higher than that with other constructs. Furtherly, those three constructs are considered reliable as the composite reliability (C/R) exceeds the minimum recommended value of 0.7 (Hair *et al.*, 2014).

As noted, PLS is a non-parametric estimation procedure. Hence, the bootstrapping method is used to extract *t-value* to ascertain the significance level of each path coefficient to examine the hypotheses. The primary method used to assess the inner model is by examining the variance explained R^2 . The result of the analysis indicates the variance explained (R^2) for Supplier relationship management (SRM) and the Competitive advantage is $R_1^2 = 0.788$ and $R_2^2 = 0.607$, respectively. Another measurement used to assess the inner model is its predictive relevance, which is denoted as $Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$. The result of Q^2 in this study equals to 0.916, which means the ERP has an excellent performance in predicting the competitive advantage.

Furthermore, four hypotheses were tested by assessing the path coefficient and the *t-value* obtained from the PLS result. Table 2 lists the path coefficient (β), and *t-value* for each relationship. Based on the significance level of 5% or *t-value* of 1.96, the results demonstrate that all path coefficients are positive and significant.

Table 2 Path Coefficient and *t-value*

Hypotheses	Original Estimate(β)	Mean of subsamples	Standard deviation	t-value
$ERP \rightarrow CA (H1)$	0.617	0.626	0.113	5.439
$ERP \rightarrow SRM(H2)$	0.779	0.785	0.045	17.123
$SRM \rightarrow CA (H3)$	0.318	0.311	0.126	2.525
$ERP \rightarrow SRM \rightarrow CA (H4)$	0.248	0.244	0.101	2.445

As expected ERP influences competitive advantage (β = 0.617 and *t-value* = 5.439). This finding supports the hypothesis H_1 and confirms the previous research that ERP has an impact on the competitive advantage (Abdelghaffar, 2012; Bin Che Rose, 2009; Egdair *et al.*, 2015; Hsu & Chen, 2004; Li & Lin, 2006). The result shows that the ERP system influences the competitive advantage of export companies in East Java. In today rapidly changing technological era, the export companies must be able to adapt to the existing technology. In the current, technology is also beneficial to create a competitive advantage. The implementation of the ERP system in the export company provides various benefits, such as the integration of functions and quality information. The ERP system improves the supply chain performance and ultimately creates a competitive advantage, and increase profits for the company. Export companies generally have a large variety of competitors scattered around the world, so it is not easy for export companies in maintaining their superiority. The requirement of a technology or ERP system is mandatory in maintaining or creating a competitive advantage for the export companies in East Java.

Furthermore, ERP also has a direct impact on SRM (β =0.779 and t-value=17.132). This result is consistent with previous research on the relationship between ERP and SRM (Al-Abdallah et~al., 2014; Larson & Kulchitsky, 2000; Yu et~al., 2001). The ERP system, hence, influences the supplier relationship management. The ERP system used by manufacturing or company will support the long-term relationship with the suppliers. One of the benefits of supplier relationship management is information sharing. Sharing of quality information (Al-Abdallah et~al., 2014; Larson & Kulchitsky, 2000; Yu et~al., 2001), One dimension of the ERP system, is highly useful in improving relations among export companies.

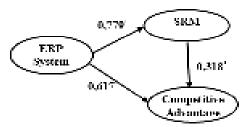


Figure 1. Research model

Figure 1 demonstrated the relationship of the constructs with its path coefficient, respectively. The result also indicates that SRM affects competitive advantage as shown by the path coefficient of 0.318 and the *t-value* of 2.252. Supplier relationship management has a positive influence on the competitive advantage. An excellent relationship among companies and their suppliers create a competitive advantage for the export companies. With a good relationship, the supplier will seriously provide a higher quality product and of course, at a more affordable cost. It is not easy for an export company to launch a new product quickly if a flexible supplier does not support it.

This result is consistent with previous research by (Al-Abdallah *et al.*, 2014; Cousineau *et al.*, 2004; Thatte, 2007; Williams, 2006). The last finding is that SRM mediates the influence of ERP on the competitive advantage, as shown by the path coefficient of 0.248 and the *t-value* of 2.445. This result indicates that supplier relationship management directly affects the competitive advantage and also mediates the relationship between ERP and competitive advantage. In summary, all hypotheses H_1 , H_2 , H_3 , H_4 are supported as expected.

The level of uncertainty faced by export companies in East Java is relatively high and diverse, such as the number of uncertain requests, and constantly changing prices. This situation is becoming more uncertain since the export companies are also selling their products overseas where the competitive environment is continuously changing. If the company is not flexible, it will be difficult for the company to maintain the existence or competitive advantage of the export company itself.

DISCUSSION

The present study was designed to examine the effect of ERP system on the competitive advantage and the mediating role of SRM in that relationship. The findings indicate that the results are in agreement with the previous study. ERP affects the competitive advantage directly and indirectly. This finding coincides with previous research arguing that the ERP system is a central system for integrating all related function within the supply chain network. Once a system is integrated, an organization will perform much better in terms of shorter lead time, reduced cost, and better quality. The ERP also affects the SRM, which means that with the integrated system in place, the

relationship between firm and supplier is getting better, and both parties will gain mutual benefit. The most interesting finding was that SRM mediates the influence of ERP system on the competitive advantage. When a relationship between supplier and company is well established, both parties will gain a higher mutual benefit from the indirect effect of the ERP system implementation. The result also demonstrated that the SRM, as expected, influences the competitive advantage. As the supplier support, the firm will be able to provide the product needs such as better quality, shorter lead time, and reduced cost, the relationship with the supplier, will improve the competitive advantage.

CONCLUSION

The primary aim of the present research is to examine the mediating role of the SRM in improving the competitive advantage. The study reveals that SRM mediates the influence of ERP on a competitive advantage. The findings also support the other three hypotheses. ERP influences the competitive advantage directly. An establishment in ERP system enables the firm to integrate all related function either externally or internally such that they can collaborate in a much better manner. This study, as expected, has also shown that the ERP influence the SRM directly and the competitive advantage indirectly. The firm, therefore, is necessary to invest in the ERP resources in the pursuit of superior competitive advantage. This work contributes to the current research in the supply chain management, particularly to the relationship of the ERP with the competitive advantage. This work also suggests an implication that managers should invest in an ERP system and establish an excellent SRM to enhance the competitive advantage of the firm

REFERENCES

- Abdelghaffar, H. (2012). Success factors for ERP implementation in large organizations: The case of Egypt. *The Electronic Journal of Information Systems in Developing Countries*, *52*(1), 1–13.
- Al-Abdallah, G. M., Abdallah, A. B., & Hamdan, K. B. (2014). The impact of supplier relationship management on competitive performance of manufacturing firms. *International Journal of Business and Management*, 9(2), 192–202.
- Bin Che Rose, R. (2009). A conceptual framework of the relationship between organizational resources, capabilities, systems, competitive advantage and performance. *Research Journal of International Studies*, 12, 45–58.
- Clulow, V., Gerstman, J., & Barry, C. (2003). The resource-based view and sustainable competitive advantage: The case of a financial services firm. *Journal of European Industrial Training*, 27(5), 220–232.
- Cousineau, M., Lauer, T. W., & Peacock, E. (2004). Supplier source integration in a large manufacturing company. Supply Chain Management: An International Journal, 9(1), 110–117.
- Egdair, I., Rajemi, M. F., & Nadarajan, S. (2015). Technology factors, ERP system and organization performance in developing countries. *International Journal of Supply Chain Management*, *4*(4), 82–89.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelweiser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) an emerging tool for business research. *European Business Review*, 26(2), 106–121.
- Hidayat, R., & Akhmad, S. (2016). Effect of the enterprise resource planning (ERP) on competitive advantage and performance of manufacturing firms in Indonesia. *Journal of Engineering and Applied Science*, 11(10), 2298–2303.
- Hsu, L. L., & Chen, M. (2004). Impacts of ERP systems on the integrated-interaction performance of manufacturing and marketing. *Industrial Management & Data Systems*, 104(1), 42–55.
- Jap, S. D. (2001). Perspectives on joint competitive advantages in buyer–supplier relationships. *International Journal of Research in Marketing*, *18*, 19–35.
- Larson, P. D., & Kulchitsky, J. D. (2000). The use and impact of communication media in purchasing and supply management. *Journal of Supply Chain Management*, *36*(3), 29–39.
- Li, S., & Lin, B. (2006). Accessing information sharing and information quality in supply chain management. *Decision Support Systems*, 42(3), 1641–1656.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Subba Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, *34*(2), 107–124.
- Moreno, A. M., & Casillas, J. C. (2008). Entrepreneurial orientation and growth of SMEs: A causal model. *Entrepreneurship: Theory and Practice*, *32*(3), 507–528.
- O'Brien, J. A., & Marakas, G. M. (2007). *Management information systems*. Tenth Edition. New York, NY: McGraw-Hill/Irwin.
- Prasojo. (2015). *Surabaya di banjiri hotel bintang 3*. Retrieved from www.housing-estate.com/read/2015/01/28 /surabaya-dibanjiri-hotel-bintang-3/.

- Jenatabadi, H. S., Hui, H., Ismail, N. A., Binti Mohd Satar, N., & bt Wan Mohamed Radzi, C. W. J. (2013). Impact of supply chain management on the relationship between enterprise resource planning system and organizational performance. *International Journal of Business and Management*, 8(19), 107–121.
- Saeidi, P., Saeidi, S. P., Sofian, S., Saeidi, S.P., Nilashi, M., & Mardani, A. (2019). The impact of enterprise risk management on competitive advantage by moderating role of information technology. *Computer Standards & Interfaces*, *63*, 67–82.
- Tarigan, Z. J. H., Lianto, & Basana, S. R. (2019). The impact of organizational commitment on upgrading ERP for maintaining the quality of information and the ERP performance. *IOP Conf. Series: Materials Science and Engineering*, 473, 1–7.
- Thatte, A. A. (2007). *The competitive advantage of a firm through supply chain responsiveness and SCM practices.*Doctoral dissertation. The University of Toledo.
- Williams, S. J. (2006). Managing and developing suppliers: Can SCM be adopted by SMEs? In *International Journal of Production Research*, *44*(18–19), 3831–3846.
- Wisner, J. D., & Tan, K. C. (2000). Supply chain management and its impact on purchasing. *The Journal of Supply Chain Management*, *36*(3), 33–42.
- Yu, Z., Yan, H., & Edwin Cheng, T. C. (2001). Benefits of information sharing with supply chain partnerships. *Industrial Management & Data Systems*, 101(3), 114–121.

WHAT WE KNOW AND WHAT WE NEED TO KNOW ON PUBLIC PROCUREMENT OF INNOVATIONS: A RESEARCH AGENDA

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ABSTRACT

This paper analyses existing literature on public procurement of innovations (PPI), its many dimensions and policy uses as a tool to foster innovation. Upon the basis of this thorough review, gaps are identified and research proposals are advanced to examine the role of PPI as a development tool in in relation to tipping points. The paper conducts a systematic review of literature which starts with a descriptive overview of the extant literature and a short history on PPI development. The gathered papers are classified according to the scope of PPI, their geographical scope, the number and type of public and private players, and the maturity of the research methodologies. Afterwards, a summary on findings and opened questions are derived. A set of research proposals worth investigating is proposed. This suggests that PPI can produce tipping point in the policy and social system. Discontinuities due to demand-side policies may signal the effectiveness in order to fulfill societal needs.

Keywords: Demand-oriented policies, public procurement of innovations, R&D subsidies.

INTRODUCTION

Knowledge economy refers to describe new relationships among economics and technological players across markets. According to the definition used by the OECD (1996), knowledge-based economies are those "based on the production, distribution and use of knowledge and information". In a similar definition, Powell and Snellman (2004) sustain that knowledge economy involves the development of products and services based on knowledge-intensive activities, which contributes to an uplifted rhythm of technological and scientific advances, along with a quick product obsolescence.

A characteristic of this knowledge when discovered and made public is that it has a zero marginal cost when adding more users of it. Hence, it challenges the concept of scarcity. On the other hand, knowledge can also create increasing returns by forming network economies, which take monopoly control in society (e.g. Microsoft) by inhibiting competition. An additional characteristic of knowledge and information that distances it from the orthodox theory, when these are seen as marketable goods, is that they do not possess the characteristic of homogeneity of competitive markets: each piece of information is different from any other piece of information (Stiglitz, 2002).

In particular, those enterprises known as high impact are of interest. The achievement of economies of scale and the technological origin of innovation have been identified as key elements associated with high impact entrepreneurship (Acs, 2008, 2010). However, little progress has been made in the study of mechanisms that lead these enterprises to results that can be scaled from a systemic perspective, beyond the behavior of the individual or the conditions that foster innovation (Acs & Correa, 2014). Hence, it is essential to place greater emphasis on the role of demand as a systemic element to generate entrepreneurship of scientific and technological origin; network effects, aggregate demand, technological developments, changes in market structure, regulations, large buyers and pre-commercial public policies are some of the mechanisms identified as demand side economies (Edquist, 2011; Henrekson & Stenkula, 2010).

One of the best known mechanisms is the process of public acquisition of innovations or PPI by its acronym in English (Edquist & Zabala-Iturriagagoitia, 2015; Edler & Georghiou, 2007), which they can drive the development of new products and services where the market is still non-existent or requires rules of operation, as was the case with the first computers (Edquist, 2011). Without the mechanisms of public demand, the first computers could hardly have been developed. The same has happened in other sectors of a scientific nature such as aerospace, cryptography, communications, and military, whose technological development originates in public demand. Through the technological and business capabilities created by the scale achieved in the PPIs, the process of entrepreneurship continues, responding to a demand that now tends to be global, public and private.

From the scientific-academic perspective, there is little research on policies related to the generation of demand for innovation (Edquist & Zabala-Iturriagagoitia, 2015). Additionally, when it comes to global markets as elements of demand, little attention has been given to the study of international entrepreneurship from developing countries, especially from Latin America (Felzensztein, Ciravegna, Robson, & Amorós, 2015).

From the above background, this paper aims at developing a comprehensive literature review on demand-oriented policies to assess which dimensions merits more further research. Given the development and implementation of demand-oriented policies mainly in Europe, United Kingdom, and China, this paper contributes with a summary of what is known about demand-oriented policies and pertinent research avenues in relation to tipping points.

The paper is structured as follows: The method to conduct a comprehensive review of literature is firstly explained as well as the descriptive findings on innovation policies and features of emerging countries are discussed. Afterwards, a conceptual discussion is presented along with research propositions that merits further research. Implications for policy makers and researchers are discussed. The paper closes with study limitations and call to academic debate.

LITERATURE REVIEW

This section presents the method utilized to gather existing literature on demand-oriented innovation policies. The policy instruments are discussed according to the case studies, qualitative, and quantitative studies found in literature.

Demand-Oriented Policies and Energy Transition

The most researched aspect of demand-oriented industries is embedded into environmental and energy issues. Papers converge in that public purchase of innovations has become an effective instrument to foster green product innovation. For example, Stucki, Woerter, Arvanitis, Peneder, and Rammer (2018) analyze the role of taxes, regulations and voluntary agreements as supply-oriented instruments on product innovation activities as well as the interaction effect of such instruments and demand-side policies. Using firm-level data from Austria, Germany, and Switzerland, they find that taxes and regulations are negatively related with green product innovation (controlling for demand-side effects), i.e. they decrease the propensity to innovate. Moreover, subsidies and voluntary agreements are found to be positively related to green product innovation. Similarly, Groba and Cau (2015) analyze the role of policy, innovation policy, and markets on exports of renewable energy technologies in China and finds that policy structure has a role on importing renewable technologies from China. Specifically, by differentiating between incentive tariffs, obligations, and taxes, countries with incentive tariffs import more solar photovoltaic technologies that countries that only implement taxes and obligations. Regarding the role of R&D policy and innovation, while provincial spending has a positive effect on Chinese exports, central government R6D spending seems to be non-significant. One of the reasons is that spending has not been associated to innovation incentives. Another example of the role of demand-side instruments is in the electric vehicle industry in Taiwan. Su, Lin, and Li (2016) analyzes similarities and differences among policies on electric vehicle industry in Taiwan, United States, Germany, and China. Through an analytical hierarchy process, the authors analyze supply- environment- and demand-side instruments across countries. This study found that the demand side was the most relevant dimension of overall policy. From all factors analyzed, 'procurement', 'legal and regulatory', and 'public enterprise' ranked as the highest priorities for Taiwan's electric vehicle industry. In Japan and United States, demand-side instruments scored in first and second place in the 'environment' dimension of innovation policy. Finally, 'demand' policy in Taiwan was found to influence at a greater extent development of electric vehicles.

Demand-Side Instruments and Innovation Diffusion

One of the topics which has attracted academic attention is to analyze the role of demand-side instruments in the innovation process. This process refers to the critical activities deployed mainly by enterprises to ideate, filter, launch and diffuse innovations into the market. As demand-side instruments involve the participation of government, industry, and other participants, the need to understand the interplay of policies become critical. For example, Raiteri (2018) provides evidence on the positive impact of public procurement of innovations on the generality of upstream technologies in United States. A direct implication of this finding is that stimulus of public demand can foster the development of early technologies, which are characterized by uncertainty and high risks. Broad policies and political-economic systems are more prone to endure long investment returns when corporate participants focus on short term returns. In line with the effectiveness of demand-side instruments, Bugge, Coenen,

and Branstad (2018) analyzes a program for assisted living for elder and argue that, for these instruments to be effective there is a need to include requires from setting clear directionality of results rather than relying on a selforganizing system. Moreover, they suggest the orchestration of stakeholders in articulating public demand of solutions for the elder. Such mobilization of stakeholders would lead to the generation of platforms in which participants coordinate, i.e. end users and suppliers. One of the challenges to govern demand-side projects refers to stakeholders learning and reflexivity that allows them to coordinate according to the policy mix established. In another study, Li and Georghiou (2016) explore the use of signaling and accrediting catalogues as demand-side instruments that impact commercialization of innovations in China. Accreditation catalogues refer to catalogues which contain information on technologies new to the country that needs to be commercialized whereas signaling catalogues contain information on suppliers needed to develop non-existing technologies. By analyzing the cases of e-learning classroom, tunnel boring machine, and water recycling technologies, they find a general impact of catalogues on the development of lead markets. However, there is also a risk that technology being developed can be seen as nationally protected from the participation of foreign companies. Another example is the analysis of government subsidies in R&D and their impact on manufacturing of new vehicles in China, conducted by Jian Zhang, Bu, and Liu (2018). They find that such subsidies have a significant impact on assembly enterprises and non-significant effect on supporting enterprises. Interestingly, this study also shed light on the fact that demand-side instruments are more effective to handle disruptive innovations instead of incremental innovation.

Demand-Side Instruments and Broad Issues

While innovation is regularly conducted by large companies, an important topic is if small and medium enterprises (SMEs) should engage in demand-side processes. Saastamoinen, Reijonen, and Tammi (2018) explore managerial preferences regarding adoption of innovation policies and find that SMEs are inclined to network with other firms to develop products for private and public organizations rather than directly engage in demand-side processes. This raises doubts on how well demand-side instruments can be effective without other industry configurations and arrangements. In this line, through the analysis of the case of Dutch water construction sector, Wesseling and Edquist (2108) derive an iterative stage process to successfully conduct projects on public purchase of innovations. The PPI 5-stage process starts with the Emergence of user-lead or policy-led societal needs that leads to the Initiation. In this stage, the need is articulated and stakeholders set a PPI organization so the PPI tender can be announced. In the Design and selection stage, functional requirements and consortia propose innovative solutions to the need; one proposal is then selected by an expert group. The Implementation stage involves activities of innovation development, testing, and implementation. In the finalization stage, operations are started and post implementation activities as risk transfers and evaluation are deployed.

Preliminary Appraisal of Literature

Extant literature on demand-side innovation policies has evolved from seminal —and sometimes normative frameworks on how policy should be implemented- towards case studies in a variety of European countries, China, and United States. The available studies have become more positivists in nature to describe and find directionalities in the policies implemented. While there are also quantitative studies in the reviewed database, there is a need to continue with the assessment of causal issues derived from the varying innovation policies and country profiles.

While more research is needed to understand directionality, effect sizes, and even externalities generated by demand-side instruments, the socio-economic and political landscape of countries may introduce confounding variables that make analysis more complex. Therefore, general theoretical models from disciplines different to policy analysis may be useful to gain nuanced knowledge on patterns of implementations and effectiveness of innovation policies. One of such models refers to tipping points.

Introducing Tipping Points to Demand-Side Policies

Linear relationships capture phenomena in which a gradual change in an antecedent variable produces a proportional change in a consequence variable. Quantitative studies found in the scooping review share this feature. In contrast with this paradigm, non-linear relationships can be useful to understand social phenomena in which a gradual change in an antecedent variable leads to a discontinuous jump in the consequence variable, i.e. a tipping point (Lamberson and Page, 2012). While a trivial example of a tipping point could be de number of articles published in Wikipedia, this is misleading. Although the explosion of articles in Wikipedia can be considered as disproportionate, the important question to ask is if there was a discontinuous jump in such number. When a social system is under certain conditions, equilibrium is present. However, when some conditions change, equilibrium is

broken and the system can go towards another equilibrium point or even to an unstable equilibrium. These conditions are unable to produce tipping points. A system tips when a discontinuity is present in the system. This leads to an abrupt change in some variables and represents a tipping point. Such tip can be produced through positive feedback loops, similar to the suggested by Wesseling and Edquist (2108). It is important to distinguish between direct tips and contextual tips. The former occurs if a change of a variable, produces a change of such variable in the future whereas a contextual tip occurs when a change in a variable lead to change in some other variable.

Following, I advance research propositions on demand-side policies by intertwining the policy process with the concepts of tipping point – a generalist framework that may be useful to derive general patterns of policy dynamics.

RESEARCH METHOD

Since their inception in medical sciences in, scooping reviews have become more popular in social sciences as a way to summarize existing literature in order to deliver enough depth and breadth about a specific discipline (Davis, Drey, & Gould, 2009). On one hand, while systematic reviews of literature aim at comprehensively assess the internal quality of studies, a scooping review can include varying degrees of quality and grey literature. On the other hand, scooping reviews provide a more comprehensive approach than narrative reviews since the former includes analysis and synthesis of literature instead of only providing a –sometimes cherry-picked-listing of research studies. In this way, scooping reviews provide the nature, extent, and features of existing literature to summarize what is known about the field and, particularly interesting, to identify apparent research gaps to further inquiry.

This study utilized the methodological framework by Arksey and O'Malley (2005) and enhanced by Levac, Colquhoun, and O'Brien (2010). This framework includes the following six steps: (1) identify the research question, in a rather broad way so it can deliver enough breath, (2) identify relevant studies, seek strategies and terms should be explicitly stated in terms of sources of information, time span, and language, (3) study selection, both inclusion and exclusion criteria should be made explicit; these criteria are prone to be refined according to new findings and familiarity with the field, (4) chart the data, a description of the gathered literature is presented as a starting point for further analysis, (5) collate, summarize, and report results, a thematic construction of the literature is conducted to provide a broad overview of the field, (6) consultation, an optional step in which practitioner input is sought. This paper excluded the final step from the scooping review.

1) Identify the research question, in a rather broad way so it can deliver enough breath

This paper assumes that policy makers can be better informed on the effects of demand-oriented instruments on development and commercialization of innovations. Given that the field is still emerging and existing reviews on demand-oriented policies only summarize other studies, this paper aims at identifying information to discuss policy demand-oriented instrument effectiveness and advancing research proposals. The research question guiding the scoping review refers to what is the effectiveness to which demand-oriented policies and instruments are utilized to foster innovation?

2) Identify relevant studies

To identify research articles, time span, language, sources of literature, and search terms were set beforehand. The time span ran from 2000 to 2018. Preliminary readings on the topic informed on the publishing of seminal studies on demand-oriented instruments and policies. Previous studies exist but they do not refer to the innovation focus that guides the review. Language of choice was English to assure replicability of the review. Search on only academic journals was conducted in the digital databases Scopus and Web of Knowledge since they include more high-quality journals than other databases and journal listings. The search terms were set to reflect the broad aspects of the demand-oriented perspective, innovation, and policy. The search term 'demand-' was particularly challenging since initial searches resulted in extensive searches in the broad discipline of economics beyond the focus on innovation policies. According to the discussed inclusion criteria, the search resulted in 446 articles.

3) Study selection

Articles were screened using title, abstract, and key words, 368 articles were excluded kept since article domain was in the scope of the review –innovation policy. This led to a final database of 78 peer-reviewed research articles¹.

¹ Full list of papers in the scooping review is available from the author upon request.

4) Chart the data

From the 78-articles final database, 25 are conceptual papers that advance different models and frameworks to assess a number of policy and instruments in a number is industries. From the remaining 53 empirical papers, 31 papers refer to qualitative studies while only 20 papers include quantitative methodologies. Qualitative research mainly involves case studies. Two papers involve mixed methods. After thematic classification of the 53 empirical research papers by industry, 10 paper addresses energy issues, five papers analyze environmental technologies, five papers analyze innovations in the pharmaceutical sector, three papers analyze innovations related to electric automobiles, and three papers refers to IT innovations. Urban issues are addressed in five papers and government policies are analyzed in by eight papers. The remaining 14 papers analyze issues in R&D as well as macroeconomic issues related to such policies.

5) Collate, summarize, and report results

According to the available information in the papers, most of research on demand-oriented policies has been conducted in European countries with 22 papers while studies in China and other Asian countries include six and four papers, respectively. Five papers have been conducted with data of United States, and six papers conduct comparative policy studies. The scooping review shed light on the nature of research conducted in the field of demand-oriented innovation policies and instruments.

DISCUSSION

Tipping Points and Public Purchase of Innovations

From a procedural standpoint of demand-side policies, the policy process starts with the initialization of projects which involve the participation of government, enterprises, and civil society in some cases. These projects depart from the articulation of societal demand of innovation to solve problems across countries. Particularly, PPI instruments shape the say to conceptualize, develop, and launch innovations. For tipping points to occur at this stage, need to focus on the disruptive dimensions of innovations to meet societal needs. Contrary to incremental innovations, disruptive innovations change previously set industry metrics and encroach from fringe markets towards mainstream markets. Therefore:

Proposition 1: Demand-side instruments create tipping point during the initialization stage by linking societal needs with disruptive innovations.

Designing innovations involve the participation of stakeholders beyond on supply and demand sides of markets. Articulating demands and linking them to societal challenges requires the setting of expectative as well as ways of interacting. The role of government is crucial to handle organizational and relational frictions but other participants as academia of civil society may also interact in the ideation, design, and launch of innovative solutions. Given that demand-side instruments initiate a project in pre-commercialization stages, involvement become higher than with traditional innovation development activities inside a single organization. The new market structure can create contextual tipping points in variables other than the innovation solution. Hence,

Proposition 2: Designing innovations using demand-side instruments create tipping points by creating new market structures.

Once an innovation has launched to the market to fulfill a societal need, end-user start adopting the innovation and, thus, the innovation diffuses. Diffusion process starts when the lead market has adopted the innovation. When slower users start adopting the innovation, there is a disproportionate change in adoption due to a small change in the number of products in the market. As the innovation has been designed and launched to the market following the process of demand-side instruments, the likelihood of adoption is higher. As the innovation is adopted, a tipping point may appear in the transition from lead market to the massive market. Therefore,

Proposition 3: Implementing and evaluating disruptive innovations by all stakeholders create tipping points at the diffusion stage.

CONCLUSION

The scooping review of literature has revealed some well-researched areas of demand-side innovation policy across industries and countries but in the overall, has lacked building upon a generalist social science models. This paper introduces tipping point models as a way to build upon a model that allows researchers to find general patterns that go beyond the idiosyncratic variables and local contexts.

This paper comes with some limitations. First, scooping review should be taken as preliminary since it lacks intercoder reliability that assures replication of the review. Second, although the literature on tipping points is vast from a formal mathematical standpoint, this paper has kept the notation in narrative form. Third, the concept of demand-side policy is taken from the procedural point of view. Given the multiple definitions of demand-side instruments, other definitions can equally be considered. Future research can work on finding tipping points according to different perspectives ranging from the case studies to formal mathematic studies. Above all, the debate on innovation policies remains open and I wish other researchers engage in fruitful academic debates.

REFERENCES

- Acs, Z. J. (2008). Foundations of high impact entrepreneurship. *Foundations and Trends in Entrepreneurship*, 4(6), 535–620.
- ----- (2010). High-impact entrepreneurship. In Z. J. Acs, & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research: An interdisciplinary survey and introduction* (pp. 165–182). New York, NY: Springer New York.
- Acs, Z. J., & Correa, P. G. (2014). *Identifying the obstacles to high-impact entrepreneurship in Latin America and the Caribbean*. GMU School of Public Policy Research Paper, 5.
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.
- Bugge, M. M., Coenen, L., & Branstad, A. (2018). Governing socio-technical change: Orchestrating demand for assisted living in ageing societies. *Science and Public Policy*, 45(4), 468–479.
- Davis, K., Drey, N., & Gould, D. (2009). What are scoping studies? A review of the nursing literature. *International Journal of Nursing Studies*, 46(10), 1386–1400.
- Edler, J., & Georghiou, L. (2007). Public procurement and innovation—Resurrecting the demand side. *Research Policy*, *36*(7), 949–963.
- Edquist, C. (2011). Design of innovation policy through diagnostic analysis: Identification of systemic problems (or failures). *Industrial and Corporate Change*, 20(6), 1725–1753.
- Edquist, C., & Zabala-Iturriagagoitia, J. M. (2015). Pre-commercial procurement: A demand or supply policy instrument in relation to innovation? *R&D Management*, 45(2), 147–160.
- Felzensztein, C., Ciravegna, L., Robson, P., & Amorós, J. E. (2015). Networks, entrepreneurial orientation, and internationalization scope: Evidence from Chilean small and medium enterprises. *Journal of Small Business Management*, 53(1), 145–160.
- Groba, F., & Cau, J. (2015). Chinese renewable energy technology exports: The role of policy, innovation and markets. *Environmental and Resource Economics*, 60(2), 243–283.
- Henrekson, M., & Stenkula, M. (2010). Entrepreneurship and public policy. In Z. J. Acs, & D. B. Audretsch (Eds.), Handbook of entrepreneurship research: An interdisciplinary survey and introduction (pp. 595–637). New York, NY: Springer New York.
- Jiang, C., Zhang, Y., Bu, M., & Liu, W. (2018). The effectiveness of government subsidies on manufacturing innovation: Evidence from the new energy vehicle industry in China. *Sustainability*, *10*(6), 1692, 1–11.
- Lamberson, P. J., & Page, S. E. (2012). Tipping points. Quarterly Journal of Political Science, 7(2), 175–208.
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*(69),1–9.
- Li, Y., & Georghiou, L. (2016). Signaling and accrediting new technology: Use of procurement for innovation in China. *Science and Public Policy*, *43*(3), 338–351.
- OECD (1996). The knowledge-based economy. Paris: OECD.
- Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annual Review of Sociology*, 30, 199–220.
- Raiteri, E. (2018). A time to nourish? Evaluating the impact of public procurement on technological generality through patent data. *Research Policy*, 47(5), 936–952.
- Saastamoinen, J., Reijonen, H., & Tammi, T. (2018). Should SMEs pursue public procurement to improve innovative performance? *Technovation*, 69, 2–14.
- Stiglitz, J. E. (2002). Globalization and its discontents. New York, NY: W. W. Norton & Company, Inc.
- Stucki, T., Woerter, M., Arvanitis, S., Peneder, M., & Rammer, C. (2018). How different policy instruments affect green product innovation: A differentiated perspective. *Energy Policy*, 114, 245–261.
- Su, Y. S., Lin, C. J., & Li, C. Y. (2016). An assessment of innovation policy in Taiwan's electric vehicle industry. *International Journal of Technology Management*, 72(1–3), 210–229.
- Wesseling, J. H., & Edquist, C. (2018). Public procurement for innovation to help meet societal challenges: A review and case study. *Science and Public Policy*, 45(4), 493–502.