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The Status and Issues of Generally Accepted Accounting Principles and Accounting Education in Laos

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ラオスの会計制度と会計教育の現状と課題

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Introduction

The objective of this paper is to clarify the status of generally accepted accounting principles (GAAP) and bookkeeping/accounting education in Laos, in addition to identifying related issues. To this end, we visited Laos for six days, from August 7 to 12, 2018, to conduct a factual investigation as part of Senshu University's "project to spread awareness on double-entry bookkeeping to companies in Laos."

In Laos, a symposium on the "Current Status and Issues of Managerial and Financial Accounting in Laos" that was held at the National University of Laos on August 8th and 9th, and on August 10th, members of the business community were interviewed on the use of accounting. In addition, on August 11th, at the Laos Chamber of Commerce and Industry, we surveyed on the current status and plans for certification tests for double–entry bookkeeping. We interviewed the accounting bureau of the Lao Ministry of Finance regarding the CPA qualification and CPA education in Laos. At the Lao Ministry of Sports and Education, we learned about the current status of bookkeeping education. Finally, on August 12th, through a factory tour at a company, we were able to study the actual use of bookkeeping and accounting.

The focus of the factual investigation was based on interviews with the business community and questionnaire surveys. For the interviews, we decided to research in advance to understand the current status of bookkeeping and accounting in Japan and compare this with the actual situation in Laos. In addition, for the questionnaire, we established 10 questions about the usefulness of bookkeeping and accounting to understand each respondent's awareness of the usefulness of bookkeeping for management.

To achieve the objective mentioned above, Section 1 will clarify GAAP in Laos and the accounting software that is influenced by the Plan Comptable. Section 2 will clarify the qualification system related to accounting and educational programs in Laos compared with Japan. Section 3 is a comparative study on the differences in how accounting is used in Japan and Laos through interviews with Lao businesspeople. Section 4 shows the results of the questionnaire on how accounting is used in Lao companies. Section 5 will clarify the actual use of accounting in Lao companies. Lastly, the findings of this paper will be summarized.

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1. Lao Accounting System and Accounting Software

Before investigating the facets of bookkeeping and accounting in Laos, we will first discuss its classification of companies and the accounting system that has been adopted. In addition, we will introduce the accounting software that is used in Laos.

1.1 Classification of companies and accounting systems

In Laos, the accounting system that is applied differs depending on the company classification. Companies are classified as large, medium, small, or micro entities. The company classification by size, number of companies, and composition ratio of Lao companies in 2014 are shown in Table 1.

The Lao Securities Exchange (LSX) was established in October 2010 by the Central Bank of Laos (51%) and the Korea Exchange (49%). As of September 2018, only the following nine companies are listed: Banque Pour le Commerce Exterieur Lao Public, EDL-Generation Public Company, Lao World Public Company, Petroleum Trading Lao, Souvanny Home Center, Phousy Construction and Development, Lao Cement, Mahathuen Leasing, and Lao Agrotech Public Company (Kitano, 2017)¹. According to the Lao Securities Commission Office (LSCO), the aim is to have between 25 to 35 companies listed by 2020.

Company size	Number of companies	Composition ratio								
Large entity	307 companies	0.2%								
Medium entity	5,847 companies	4.7%								
Small entity	11,511 companies	9.2%								
Micro entity	107,208 companies	85.9%								
Total	124,873 companies	100.0%								

Table 1 Composition of companies in Laos (2014)

Source: Created by the authors based on materials from the Lao Ministry of Finance received on August 10, 2018.

The accounting systems in Laos differ depending on the classification of company size. Large entities must use the International Financial Reporting Standards Foundation (IFRS). Medium and

¹ http://www.lsx.com.la/info/stock/listedCompany.do?lang=en as of October 2, 2018.

small entities (MSE) use Lao GAAP for tax accounting. The Ministry of Finance has developed accounting software for tax accounting, which companies use to file taxes. Cash-based accounting is permitted for micro entities, and corporate tax is based on the annual profit.

Accounting for large entities is done by accounting staff with the same skills as those in developed countries. In addition, in MSEs, even if employees have little knowledge on bookkeeping, tax accounting can be performed using accounting software, and thus this does not adversely affect the accounting system. We received information in advance from the Kawasaki Chamber of Commerce and Industry, who is a sponsor of this project, that managers of MSEs lack the knowledge on bookkeeping and accounting necessary to use accounting data for business management. They only perform cash flow calculations, and thus, managers of micro entities cannot be expected to have knowledge about bookkeeping and accounting. However, according to the interview with the deputy director and section manager of the Accounting Bureau of the Lao Ministry of Finance, the Ministry of Finance does not need to spread bookkeeping knowledge among companies.

Meanwhile, judging by the output of the accounting software of MSEs, accounting items are assigned codes, which indicates that it has been influenced by the French Plan Comptable Général (PCG).

It is well known that the French accounting system requires unified annual financial reports. This is because the French Ministry of Economy, Finance, and Industry requires a uniform format from which to obtain economic data to draft the nation's economic plan. PCG acts as a framework for financial accounting to contribute to these requirements. The content of this framework consists of the objective and principles of financial accounting (scope, principles, and definition of financial statements), assets, liabilities, shareholder's equity and earnings, definition of expenses, rules for recording and evaluation, structure and use of bookkeeping and accounts (accounting organization, bookkeeping, accounting charts), and financial statements (rules for display and models)².

² Since it was announced in 1947, PCG has been revised in 1957, 1982, and 1999. Although there has been no change in the basic framework of financial accounting, in recent years, revisions have been made due to requests for harmonization with EU and IASB accounting standards. For the description of PCG here, Schulzke (2016) FRA-6-8 was referenced. The development of PCG after 1947 is described in detail in Yanaga (2013). In addition, Jacques et al. (2011) contains a detailed description of the current state of financial accounting in France compared with IFRS.

According to Naito (2010), it is useful not only for financial accounting but also for management accounting. In other words, by using a unified accounts and financial statement format, it is possible to understand cost structure by department or by product, and it also carries the advantage of making comparisons possible with other companies in the same industry. In short, the Ministry of Finance, rather than disseminating bookkeeping practices, has introduced a unified accounting system, using accounting software that is not only useful for tax accounting, but also for business management.

Here, we will look at the process involved in introducing French PCG into Laos. According to prior research, France, a former colonial power, assisted in constructing an accounting system adapted to the market economy as part of the economic reforms aimed at the transition of Laos's market economy, which began developing in 1986.

Besides setting up the PCG, comprehensive support for accounting techniques was provided, such as training for accounting experts and setting up accounting organizations. In parallel to designing this system, there were attempts at experimental adoption of PCG in companies in Vientiane province, and work was undertaken to establish PCG, such as dispatching an accountant from France to conduct training³.

1.2 Accounting standards and accounting software in Laos

Companies in Laos are required to comply with the accounting law⁴. Double-entry bookkeeping is required for entries in accounting books, and companies are required to take measures to preserve assets and prevent fraudulent or dishonest accounting records (Accounting Law, Article 17). In addition, all accounting records must be stored with evidence for at least 10 years (Accounting Law, Article 50). Furthermore, accounting records and documents are required to be submitted without delay when a tax examination is conducted.

There are three types of Lao accounting software that conform to these accounting standards,

³ Refer to Oshita (2005) p.194–196. According to Oshita, in Laos, PCG functions as a means of accounting standardization, national control through standardization, business management, and training to contribute to accounting education (same, p.198–200).

⁴ The Accounting Law for Laos can be downloaded at the following link: https://www.laoofficialgazette.gov.la/index.php as of September 19, 2018.

APACC, Intercom, and BanhJi. Currently, APACC, which is sold by APIS, is the governmentauthorized software used in many accounting and tax accountant offices, including the Ministry of Finance. It allows the use of English and Lao, and supports double-entry journal entries. This accounting software for MSEs has been influenced by the Plan Comptable. However, criticisms have also been raised that all the accounting software in Laos are outdated (Fujita and Ito, 2018).

The above is an introduction of the accounting system and accounting software, but this does not mean that all companies in Laos are in conformance with the accounting system by recording entries in accounting books and creating financial statements. This point is the purpose of this survey, and the aim is to understand the actual situation. In other words, because there are so many MSEs that do not conform to the accounting system, the Ministry of Finance wishes to correct this and increase tax revenue. However, our aim, as part of the project to spread awareness on double– entry bookkeeping, is to establish a sound management system for Lao companies. For management to be sound, it is necessary to understand and practice management accounting. To do this, we believe that it is important to educate people about the basics of the required bookkeeping and accounting knowledge.

2. Qualification System in Japan and Laos

This section will compare the qualification systems in Japan and Laos and clarify the features of the qualification system related to accounting in Laos. To this end, first we will explain the CPA (certified public accountant) qualification licensed by the Ministry of Finance, bookkeeping seminars by the Lao Chamber of Commerce and Industry, and others. Then, we will clarify the issues in adapting the bookkeeping proficiency test to Laos.

2.1 Bookkeeping certification examination in Japan

In Japan, there are several certification examinations in addition to the bookkeeping certification sponsored by the Japan Chamber of Commerce and Industry. These include the certification for bookkeeping practice by the Japan Commercial School Association, the certification for bookkeeping ability by the Japan Association for Accounting Education, the tax accountant examination by the National Tax Agency of Japan, and the examination for CPAs and CPAs of audit review boards. These are unified, nationwide exams. Among these, we will clarify the content of the bookkeeping certification examination of the Japan Chamber of Commerce and Industry (JCCI), which is well known among Japanese businesspeople.

Based on the certification examination guide (2018 version) of the Chamber of Commerce and Industry, the JCCI bookkeeping certification is summarized in Table 2 (Japan Chamber of

Level	Level/abilities	Exam subjects	Exam duration	Passing score standard
Level 1	A gateway to national qualifications such as CPA and tax accountants. If the applicant passes this test, they are eligible for the tax accountant exam. Applicants acquire highly advanced skills in commercial bookkeeping, financial accounting, industrial bookkeeping, and cost accounting and can perform business management and analysis in view of laws and regulations relating to corporate accounting, such as accounting standards, company law, and rules for preparing financial statements. This level is what one might expect to learn in university.	Commercial bookkeeping; financial accounting; industrial bookkeeping; cost accounting	90 min 90 min (with break in between)	70 points or more However, the score must be 40% or more in each subject 40% or more
Level 2	One of the qualifications most required by companies as useful knowledge for business management. Required for corporate finance staff. Applicants acquire highly advanced skills in commercial and industrial bookkeeping (including cost accounting) and understand management details from the figures in the financial statements. This level is what one might expect to learn in high school (commercial high school) .	Commercial and industrial bookkeeping (including cost accounting) • Up to 5 questions	120 min	70 points or more
Level 3	Basic knowledge essential for business people. Many companies would evaluate this skill highly regardless of job type, not only for those in accounting or finance. Applicants acquire basic commercial bookkeeping skills, and basic operations such as proper processing of accounting-related documents and preparation of blue tax return documents can be performed to some extent. Useful for small business accounting.	Commercial bookkeeping • Up to 5 questions	120 min	70 points or more
Beginner's bookkeeping	Basic knowledge for business people to carry out daily work, regardless of job role or type of industry. Applicants understand the basic terms of bookkeeping and the mechanism of double-entry bookkeeping and use this knowledge for business.	Commercial bookkeeping • Up to 4 questions	40 min	70 points or more
Beginner's cost accounting	Basic knowledge for business people to understand the profitability of the business regardless of job role or the type of industry. Applicants analyze and understand the basic terms of cost accounting and the relationship between cost and profit and use this knowledge for business.	Cost accounting • Up to 4 questions	40 min	70 points or more

Table 2 Summary of the JCCI bookkeeping certification

Source: FY 2018 Chamber of Commerce and Industry Certification Examination Guide. Japan Chamber of Commerce and Industry, pp. 13-14.

Commerce and Industry, 2018, pp. 13-14).

According to this guide, the Level 1 examination is held twice a year (second Sunday in June and third Sunday in November). The test fee is 7,710 yen. The examinations for Level 2 and Level 3 are held three times a year (second Sunday in June, third Sunday in November, and fourth Sunday in February). The test fees for Level 2 and 3 are 4,630 and 2,800 yen, respectively. Furthermore, until February 2017, there was a Level 4 examination. Thereafter, a beginner's level for bookkeeping was introduced on April 1, 2017, and from April 2018, a beginner's level for cost accounting was introduced. The beginner's level is an online examination that can be taken at any time at a testing agency (for example, a vocational school), and a pass/fail judgment is made on the spot. The beginner–level test fee is 2,160 yen for bookkeeping or cost accounting.

Table 3 shows the number of applicants who took the test and those who passed for each level in FY 2017. Because these results are for the FY 2017 examination, beginner–level cost accounting is not included in the beginner level, and only the results for beginner–level bookkeeping is shown. More than 400,000 applicants took the test, from beginner level to Level 1. The total number of people who pass the test each year from all levels is 160,000, which is about 40% of all applicants. The beginner's level has a relatively high pass rate of 54%, and it clear that the Level 1 exam, with a pass rate of about 7%, is quite a difficult exam.

	Number of applicants for exam	Actual number of examinees	Number of passing grades	Pass rate
Level 1	19,739	15,389	1,113	7.2%
Level 2	200,253	151,922	46,036	30.3%
Level 3	320,992	250,029	115,037	46.0%
Beginner		4,167	2,243	53.8%
Total	540,984	421,507	164,429	39.0%

 Table 3 JCCI bookkeeping test takers and number of successful applicants (FY 2017)

Source: Created by the authors based on the JCCI certification examination

2.2 LCPAA

In February 2018, an agreement was signed between the UK's Association of Chartered Certified Accountants (ACCA) and the Lao Ministry of Industry and Commerce, for the further and sustainable development of the accounting profession in Laos⁵. According to this, there are two types of activities for strengthening the CPA education program and developing the post-certification education program.

To first strengthen the CPA education program, the ACCA, the Lao Ministry of Finance, and the Laos Certified Professional Accountants (LCCPA) will cooperate under a support project of the World Bank, and to strengthen CPAs, efforts are being made to reevaluate the current educational program of the LCCPA. Regarding the second point of developing a post-certification education program, efforts are underway to develop a special vocational education program after acquiring the certification, to ensure that those who are currently CPAs in Laos meet the qualification criteria set by the ACCA.

The syllabus [Lao Certified Public Accountants (Lao CPA) Qualification] for the LCPAA educational program that is currently being reevaluated includes the following type of program.

To be certified as a CPA in Laos, it is necessary to complete 14 exam subjects, 3 years of work experience, and a professional ethics module. There are six months of basic and specialized courses that function as the educational program for the exam. The basic courses are divided between knowledge and skills. Knowledge consists of three subjects: corporate accounting, management accounting, and financial accounting. Skills consist of six categories: corporate legal affairs, performance management, tax law, financial reporting, audit and assurance, and financial management. After completing all courses in governance, risk, and ethics; corporate reporting; and business analysis, two specialized courses are completed, which can be selected from advanced financial management, advanced performance management, advanced tax law, and advanced audit and assurance, making a total of five courses completed.

2.3 Double-entry bookkeeping qualification from the Lao Chamber of Commerce and Industry

A two-day bookkeeping seminar, "Workshop on Spreading Awareness of Bookkeeping for LNCCI," is held at the Japan Ministry of Finance Policy Research Institute (PRI) along with the Lao National Chamber of Commerce and Industry (LNCCI), which has 500 member companies in

⁵ https://www.accaglobal.com/in/en/news/2018/february/new-capacity-building-project-will-shape-the-accountancy-profess.html as of September 8, 2018.

Laos, and the Kawasaki Chamber of Commerce and Industry. The first one was held on August 2017, the second in February 2018, the third in July 2018, and the fourth in April 2019.

The content of the seminar includes bookkeeping concepts and definitions, an introduction to the beginner-level bookkeeping, an introduction of new accounting software, and instruction on new accounting standards for MSEs. The lecturer is Japanese, and the lecture includes interpretation into Lao.

Themes	Duration	Lecturer
Overview and significance of bookkeeping and its effectiveness	10 min	Noguchi, Manager, Kawasaki Chamber of Commerce and Industry
Overview on beginner-level bookkeeping	90 min	Keiri Bank
Bookkeeping basics	50 min	Co., Ltd. Urakami, Managing Director
Relationship between profit and cash flow - Using the cash flow projection table -	50 min	Ito, researcher
Basics of financial statement structure and corporate analysis	50 min	Ishikawa, researcher
Various problems concerning accounting books in small businesses (Luang Prabang) Corporate management in Savannakhet (Savannakhet)	50 min	Local tax bureau staff

Table 4 Content of Bookkeeping Training in Lao Companies

Source: Materials provided by the Kawasaki Chamber of Commerce and Industry

The training content of the third seminar was as shown in Table 4. This training lasts for over 5 hours and covers a wide range of training content, including the significance of bookkeeping, bookkeeping, cash flow, financial statements, and the actual situation of local accounting. There were over 100 participants in the first seminar, 81 in the second seminar (20 people passed the comprehension test), and 172 in the third seminar (total from three provinces, Vientiane, Luang Prabang, and Savannakhet). Participant satisfaction with the workshop is high after each seminar. The total number of people who responded that they were highly satisfied and generally satisfied

was 82 out of 90 for the first session (91%); 39 out of 50 people, for the second session (78%); and 132 out of 156 for the third session (85%). This information was obtained in advance from the Kawasaki Chamber of Commerce and Industry and PRI.

2.4 Other bookkeeping certification systems

According to an interview with the Minister of Sports and Education, the Ministry of Sports and Education also conducts bookkeeping training. However, this bookkeeping training is not for general businesses or members of the general public. Instead, it is training provided so that each ministry can maintain proper bookkeeping records. Therefore, it is bookkeeping training for government officials by government officials, and it is not related to the qualification examination. Those who complete the bookkeeping training are certified as accounting officers within the ministries.

In addition to this, the National University of Laos, vocational schools, and the big four accounting firms have their own courses from which credits can be earned. Although a certificate of completion is issued after the training, it is not a nationwide, unified test like Japan's bookkeeping certification examination, nor is it a certification exam on proficiency.

2.5 Qualification process and proficiency examination

In Laos, it is common to receive the qualification through participation in educational programs. For example, there is an LCPAA educational program for Ministry of Finance CPAs. The final exam is conducted at seminars held by the Lao Chamber of Commerce and Industry, and those who pass receive a qualification of completion. The Ministry of Sports and Education offers the bookkeeping education program for officials in each ministry, and this system also grants the qualification to those who pass an exam after completing the educational program. Bookkeeping education is also conducted at Laos National University and vocational schools, and credits are awarded to those who have completed an educational program and passed an exam. In short, the qualification system for bookkeeping in Laos is limited to certifying those who have completed an educational program and passed an exam.

On the other hand, the qualification examination for bookkeeping in Japan represented by the

JCCI bookkeeping certification is a nationwide, unified proficiency test. It is possible to independently take the examination without going through an educational course on bookkeeping. In addition, because the examination is unified and conducted nationwide, the examiners do not know the examinees, and there is no scope to consider the student when scoring the exam. Designated university teachers are responsible for creating the questions on the examination, and there is no significant variation in the difficulty of the exam questions. The qualification in Laos is based on a final exam after completion of a course and is not a proficiency test. It may be that proficiency tests should also be conducted in Laos; however, it is possible that qualification examinations other than the current method in Laos, which is a final exam after the completion of a course, may not be recognized.

3. Comparison of Use of Accounting in Laos and Japan

We held a symposium at Laos National University in the form of interviews with local companies in Laos. Founders from a beer company, a commercial bank, an audit corporation, and a vocational school were meant to participate. However, all except Lao Brewery Co., Ltd. were absent, and thus lectures were given by the manager of EBIT Consultancy, a consulting firm for banks and audit firms; the CEO of 108 Jobs, a staffing agency; and Associate Professor Thongpheth Chanthanivong, Deputy Dean of Laos National University.

3.1 The role of bookkeeping in corporate management

The purpose of these interviews was to find out why bookkeeping and accounting practices are not widespread in Lao companies. The general opinion was that (1) companies do not have the time or money for bookkeeping records; (2) even if bookkeeping records were kept, they would not be of any use; (3) if bookkeeping records were kept, the tax amount would only increase. However, bookkeeping and accounting is beneficial for corporate management. (1) If one does not know how their own company is performing, it is impossible to judge whether the current situation is being managed well; (2) it is also not possible to compare the company's results with those from the previous year or with other companies in the same industry; (3) it is not possible to create a plan for the following fiscal year, and so on. Therefore, we decided to interview managers who perform accounting activities at their company.

3.2 Usefulness of accounting in a beer company

We asked Simpaserth Phoupanthong, the accounting manager for the Lao Brewery Co., Ltd., about the function of bookkeeping and accounting, the usefulness of accounting for management, and individual performance evaluations.

The first was about the role of bookkeeping and accounting. In Japan, bookkeeping and accounting are used to preserve assets, management accounting, and financial accounting. Corporate accounting principles and cost accounting standards were established after World War II to support stability in the economy.

The response to the question of how bookkeeping and accounting is used at Lao Brewery was that single-entry bookkeeping had been adopted in the past, but IFRS was introduced in 2007, and tax accounting conforms to Laos accounting standards.

For the second benefit of accounting in management, two main points were illustrated using the situation in Japan, cost accounting and budget controls. First, Japanese beer companies generally perform comprehensive cost accounting and aggregate the material costs, labor costs, and expenses for each process. As a result, cost controls can be performed for each process, and cost information can be used for price determination and profitability control for each product. In addition, accounting information is used for budget controls. By exercising budget control, the objective is to achieve the business strategy and maximize cash flow through the "Plan, Do, Check, Action (PDCA)" management cycle.

Furthermore, in the past, at Kirin Beer, Economic Value Added (EVA) and Balanced Scorecard (BSC) were introduced to create and execute strategies under a company system (Fujino and Hiki, 2004). Currently, case studies have been introduced which unite the group for value creation, or shared value (Ito, 2014 pp.73–99).

Contrastingly, Lao Brewery currently performs cost accounting by aggregating material costs, labor costs, and expenses, similar to companies in Japan. In addition, standard cost accounting has been adopted, differences between standard and actual production costs are analyzed, and corrective measures are carried out. Regarding EVA, BSC, and shared value, it was not possible to investigate the actual situation at Lao Brewery.

The third question was about the usefulness of accounting information in individual performance evaluations. Many beer companies in Japan use accounting information such as business profits to evaluate the performance of individual managers such as division managers. The results of the evaluation are partially reflected in the calculation of the manager's bonus and are used for motivation. For example, there is a case study from Kirin Beer, in which a performance–linked compensation system has been introduced in conjunction with BSC (Ito, 2014, pp. 82–84).

On the other hand, at Lao Brewery, KPIs are used to evaluate not only the managers but all employees. The difference between last year's and this year's profit was mentioned as one example of a KPI. However, these are not reflected in individual bonuses. Although there are performance evaluations for divisions and departments, this should be interpreted to mean that a performance– based compensation system has not been introduced.

3.3 Usefulness of accounting in a staffing agency

We asked Dalasarn Keovisouk, CEO of the staffing agency, 108 Jobs, about the future needs of bookkeeping and accounting education. Tatematsu, et al. (2018) report the results of a survey on the actual situation of accounting departments, targeting member companies of industry accounting associations. About 60% (44 out of 75 companies) of the companies that responded reported that they have specialist employees in their accounting departments. In addition, among the companies that answered that they favor qualifications when hiring, about half (23 out of 45 companies) listed bookkeeping Level 2.

In Japan, all businesspeople, from new employees to the president, are required to have basic accounting skills that would enable them to read financial statements. This is not only for people who graduated from an accounting department, but all people, including those who graduated from a literature department or law department. In addition, if a person holds a bookkeeping qualification, their salary may increase due to a qualification allowance. However, in the future, the requirement will not only be for skills in reading financial statements, but also the ability to use accounting information to create and execute strategy, make business decisions, or for performance evaluation; in other words, abilities in management accounting will be more in demand, and the need for education in this area will increase.

In contrast, it became apparent through the interviews that many companies in Laos do not recognize the need for bookkeeping and accounting. To the question of why there seems to be so little need for people with knowledge in bookkeeping and accounting, we received a noteworthy answer: the companies must pay qualified people a higher salary, and therefore it costs more. In other words, the reality is that many companies do not want to pay higher salaries because of qualifications. The common opinion in Laos is that bookkeeping and accounting knowledge is costlier than the return.

3.4 Usefulness of accounting in banking

We asked Sengsoulivong Kongpasa, CEO of EBIT Consultancy, a bank consulting firm, about the role of bookkeeping and accounting in the banking industry and whether it is useful for business strategies and related matters.

Bookkeeping and accounting are useful for Japanese banks for the following three reasons. First, like companies, they are used for profit and distribution calculations for shareholders and tax payments. The second is specific to banks, but accounting is used to meet Basel capital adequacy ratio requirements. The third is that banks use accounting for decision-making purposes when making investments and loans themselves. Tanimori (2007, p. 4) points out that in banks, cost accounting, bank revenue and performance management, and BSC comprise an even more effective management system.

In response, specific details could not be provided about the current state of Lao banks from the perspective as a financial consultant, due to the obligation of confidentiality. However, it was said that accounting is useful for meeting Basel regulations. The possibility cannot be ruled out that the usefulness of accounting in management will concern confidentiality. However, in this case, our question was not to what extent confidentiality would be violated, and we were expecting an answer, for example, that it is used for profit planning. This evasive response about confidentiality was a disappointing answer.

Next, we look at the usefulness of accounting in business strategy. In Japanese banks, cost accounting data is fundamentally used as the basis. In particular, activity-based costing (ABC) has

been used in Japanese banks that are in the service sector. In contrast, the comment was that Lao banks most likely use cost accounting information due to Basel regulations.

3.5 Other questions

Several other questions were also prepared. These questions were about the number of accounting staff among employees and the usefulness of accounting in audit firms and vocational schools.

First, we asked about the ratio of accounting staff to total employees. Basic data was provided by Tatematsu et al. (2018), and the number of employees in a Japanese accounting department was determined. There is a possibility that the ratio would increase if MSEs were included, so the survey was limited to the 28 companies listed on the first section of the Tokyo Stock Exchange with over 1,100 employees. As a result, although the average percentage of accounting staff is 1.5%, there are companies with a relatively high number of accounting staff, such as the Mitsubishi Corporation (4.81%) and LIXIL (3.22%). Indeed, the accounting department is a cost center that does not earn revenue. In that sense, it is also important to improve its efficiency and keep it to a minimum. However, in companies with accounting departments that support business management of the divisions, there is an understanding that the role of the accounting department improves performance beyond the cost. In comparison, the response was that at Lao Brewery, out of 2,500 employees across three factories, there is 40 accounting staff; in other words, the ratio of accounting staff to employees is 1.6%. It can be said that this reduced number reflects an extremely efficient number of the accounting staff.

Next, is an explanation of the questions planned for the audit firm. The first question was in regard to the accounting standard when a listed company prepares the financial statements and the audit standard when the audit firm audits the same financial statements. For example, looking at the FY 2014 audit report by the independent auditor for the Lao Commerce Bank, which is available on the Lao Securities Exchange website, both consolidated financial statements and individual financial statements are prepared based on international accounting standards, and those financial statements are audited following international audit standards. In comparison, for the Lao Power Company, in general, financial statements are prepared according to Laos's own accounting standard, based on

historical cost, and audited following international audit standards. The second question was whether business owners are instructed on how to read and use financial statements. In addition, the following is an explanation of the questions that were planned for the vocational school. The first was on the present and future needs of bookkeeping and accounting education in Laos. The second was the expected number of candidates for bookkeeping exams and their potential. Furthermore, the third was the current status of bookkeeping and accounting education for high schoolers. However, as the speakers from the audit firm and vocational school were absent, it was not possible to receive an answer to these questions.

4. The Reality of Accounting in Laos

When trying to spread awareness of bookkeeping and accounting among MSEs in Laos, it is easy to make the connection with national tax collection. It is viewed as being introduced for tax accounting, and thus there is a possibility that it will be met with resistance. In addition, because MSEs are not listed on the stock exchange, it is not necessary to make financial statements public, so there is no need to introduce accounting for financial accounting purposes. Therefore, it may be easier to introduce bookkeeping and accounting to MSEs for management accounting, which will be useful for business management.

4.1 Overview of the questionnaire survey

We conducted a questionnaire-based survey of businesspeople in Laos, as shown in Table 5,

No.	Question
1	Can your company compare its performance with the average of its competitors in Laos?
2	Do you have an accurate understanding of your company's monthly and annual profits?
3	Do you understand how much your company must sell each month so as not to incur a deficit?
4	To increase your company's current profit by 10%, do you know by how much sales would need increase?
5	Do you know the profitability of each of your customers or suppliers?
6	Among your company's products, do you know which are more profitable and less profitable?
7	Do you understand the cost structure for each product in your company?
8	Do you know the direct costs for each product?
9	Do you know the overhead for each product?
10	Would you like to allocate production overhead more accurately?

Table 5 Survey Items for Business Management

Source: Created by the authors.

on the use of accounting for management accounting. Ten questions were studied using the 7-point Likert scale.

- (1) The question is about whether performance can be compared with other companies. As unified financial statements, such as the Plan Comptable, are prepared, it may be possible to compare performance. However, it is unclear whether industry averages are published by the Ministry of Finance.
- (2) To investigate the period of profit calculation, we asked a question about whether the monthly figure was known. If financial statements are prepared, it is natural that profit is calculated annually.
- (3) We asked whether the break-even point for sales was known. Even if financial statements are prepared, if there is no division between fixed costs and variable costs, then it will not be possible to know the break-even point. In other words, it is considered to be important management information for MSEs to divide costs between fixed and variable costs and know the break-even point for sales.
- (4) We asked participants if they were aware of the simulation concept known as CVP analysis. If they are familiar with break-even analysis, they can apply this to calculate the sales needed to achieve the profit target. To reduce the number of questions, we did not ask about other variations, such as safety margin rate and management leverage.
- (5) We asked whether the profit potential of each customer was known, for which both segmentbased accounting and accurate allocation calculation of common expenses are necessary. We asked this to examine whether they had obtained information at that level of detail.
- (6) We asked whether profitability analysis was conducted for each product. It is said that this type of analysis can be conducted using the Plan Comptable; however, this question investigated whether the same information could be obtained under the Lao accounting system.
- (7) Cost structure by product is important in determining targets for cost controls. By looking at the cost structure for each product, it is possible to set targets for cost controls starting with the relative highest. It was not possible to ask a question that delved into specifics on what kind of cost control tools are used. These types of questions can only be asked in interviews.
- (8) This question was regarding awareness of direct costs, which might be known if the cost

structure has been determined by product. If direct costs are not known, then it is not possible to perform cost calculations or cost management. This question is therefore about the absolute fundamentals.

- (9) This question examines whether allocation calculations can be performed to understand overhead expenses. If direct costs are unknown but overhead costs are known, this indicates a lack of accounting knowledge, which this question checks for.
- (10) An accurate allocation calculation of overhead costs is an ongoing issue in cost accounting. This question checks whether this is understood.

4.2 Survey results

We surveyed 10 businesspeople who participated in the session at Laos National University. In addition, through the Lao Chamber of Commerce and Industry, we surveyed 74 people who participated in the seminar sponsored by the Lao Chamber of Commerce and Industry. However, two people responded that they did not understand the meaning of the questions, and so they were not included in the total. Among the questionnaires collected by the Lao Chamber of Commerce and Industry, 6 people were from Vientiane, 25 from Savannakhet, 4 from Luang Prabang, and 37 from Champassak. Table 6 shows the results from a total of 82 questionnaires compiled by region. In addition, the source data from the 82 people from each area is shown in Appendix 1 (symposium and Vientiane), Appendix 2 (Savannakhet and Luang Prabang), and Appendix 3 (Champassak).

It can be seen that profitability by product, as mentioned in Question 6, is somewhat understood in all areas and across the entire region, excluding Vientiane. If the accounting method is based on the Lao accounting system, then it would be possible to calculate profitability by product. For Vientiane, all questions received less than five points, and so it is clear that accounting information is not being used for business management. On the other hand, participants from the Laos National University session received more than five points for Questions 2, 3, 6, 7, 8, and 9, and thus we can see that the information is generally used for business management.

The regions that heavily use the information for business management are Savannakhet and Champassak. In Savannakhet, more than five points were received for Questions 3, 4, 6, and 7. Questions 3 and 4 were concerning break-even analysis, which means it is possible that the

		Table	o nes	uns.c	ompne	ubyn	ic 51011						
No	Questions		Symposium		Vientiane		Savannakhet		Luang Prabang		Champassak		tal
		μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ
1	Can your company compare its	3.30	2.21	2.83	2.40	4.52	1.71	4.25	2.22	3.94	2.07	3.98	2.02
	performance with the average of												
	its competitors in Laos?												
2	Do you have an accurate	5.00	2.11	2.00	1.67	4.68	1.22	2.50	1.73	4.88	1.68	4.53	1.81
	understanding of your company's												
	monthly and annual profits?												
3	Do you understand how much	5.50	2.01	2.00	1.67	5.04	1.37	5.25	1.71	4.83	1.84	4.82	1.86
	your company must sell each												
	month so as not to incur a deficit?												
4	To increase your company's	4.60	2.01	2.17	1.83	5.04	1.30	4.25	0.96	4.64	1.56	4.58	1.67
	current profit by 10%, do you												
	know by how much sales would												
	need increase?												
5	Do you know the profitability of	3.40	2.01	3.67	2.07	3.92	1.41	2.50	1.91	3.89	2.21	3.74	1.92
	each of your customers or												
	suppliers?												
6	Among your company's products,	5.20	1.81	4.17	1.47	5.00	1.18	5.50	1.29	5.00	1.59	5.01	1.47
	do you know which are more												
	profitable and less profitable?												
7	Do you understand the cost	5.00	1.89	3.33	1.86	5.04	1.27	4.25	2.22	5.06	1.39	4.87	1.54
	structure for each product in your												
	company?												
8	Do you know the direct costs for	5.70	1.95	3.67	2.66	4.80	1.26	4.25	1.50	5.14	1.83	4.98	1.77
	each product?												
9	Do you know the overhead for	5.40	1.96	3.50	2.81	4.88	1.27	4.25	1.50	4.77	1.96	4.79	1.84
	each product?												
10	Would you like to allocate	4.60	1.51	4.00	2.61	5.04	1.33	5.00	1.63	5.17	1.99	4.99	1.79
	production overhead more												
	accurately?												
	No. of companies		10		6		25		4		37		82

Table 6 Results:Compiled by Region

Source: Created by the authors.

information is used for profit planning. At the same time, Questions 6 and 7 are about profitability by product, so it is possible it is used for profit planning, such as in product mix determination. In Champassak, more than five points were received for Questions 6, 7, and 8, so it is possible the information is used for cost control and understanding direct expenses.

Whether there is a need for a more accurate allocation calculation of production overhead costs was not of interest to participants from the Laos National University session and companies in Vientiane. The participants from the session received 5.4 points regarding their awareness of production overhead costs, and thus it can be assumed that they already are aware of overhead costs. At the same time, it is unclear why businesspeople in Vientiane are not interested in the allocation of overhead costs. It may be because they do not understand the significance of knowing overhead costs in business management.

Incidentally, it is possible that the respondents lack the accounting knowledge necessary to understand the meaning of the questions. Two respondents were already excluded from the total; however, some respondents seemed to have answered the questions without being fully comprehending their meaning. Questions 8 and 9 are corresponding questions, as these are about understanding direct costs and overhead costs. If overhead costs are known, then direct costs must also be known. However, in Champassak, five people gave impossible responses, signaling that they understand overhead costs better than direct costs: Number 48 $(3 \rightarrow 7)$, Number 56 $(2 \rightarrow 7)$, Number 76 $(5 \rightarrow 7)$, Number 81 $(6 \rightarrow 7)$, Number 82 $(5 \rightarrow 7)$. It is possible that they do not understand the meaning of direct costs and overhead costs. This suggests that the survey results must be interpreted with these limitations in mind.

4.3 Current status of accounting in Lao companies

Based only on the questionnaires, we found that accounting in Laos is currently used for management more than we had assumed. Break–even analysis is particularly well–understood, and it is possible that profit and loss statements are used in business management. However, we were unable to survey whether profit and loss statements were prepared based on direct cost accounting. If we assume that fixed and variable costs are not separated, it is difficult to understand how the break–even point for sales can be calculated using total cost accounting information from the profit and loss statement. If a simulation can be performed using accounting software, it is possible to use this information for management purposes. A survey is required to delve further into how this is used for profit planning.

The Plan Comptable can be used to calculate profitability by department or product. For example, if a profit and loss statement is prepared for each department and product, separate from the balance sheet, profitability can be measured for each department or product. The issue of allocating common expenses remains; however, this can also be understood from the perspective that overhead costs are properly allocated. However, allocation calculations based on operating capacity standards have increased support costs such as quality inspection, material handling, and setup. Thus, if an allocation is done based on operating capacity standards, this may distort costs. Therefore, ABC was devised and has been adopted in other countries. Although ABC was not included in the questionnaire for Laos, future surveys should ask about it. However, whether ABC is necessary for MSEs is an issue to consider.

4.4 Educational needs for management accounting

Management accounting is the provision of economic data that contributes to the creation and execution of strategy and business management as carried out by company management. Bookkeeping and accounting are closely linked to budget control and standard cost control. Therefore, by properly understanding bookkeeping and accounting, and recording, measuring, and reporting, it is possible to provide valuable information for management through the analysis of the differences between the beginning and the end of the fiscal period.

However, this is not all. There is also the idea that dealing with non-financial data that impacts financial data, such as budgets and standards, can provide more useful information to management. For example, if employee skills are improved, then production speed will improve, and defects will be reduced. If customers are satisfied as a result, then the trading volume will increase, which will affect profit. After assuming and executing this type of causal relationship, it is helpful to revise one's own strategy and, in some cases, create a strategy. Thus, it can be said that in Japanese companies, it is necessary to conduct management accounting education to understand the causal relationships between financial and non-financial information and to provide valuable information for the creation and execution of strategy, as well as for business management.

However, from the results of the survey of Lao companies, there is not yet interest in the creation and execution of strategy for the general corporate vision. There is also the opinion that the first step is to gain knowledge on bookkeeping and accounting. This is of course understandable, however, if businesspeople are not convinced by the point that keeping accounting books is beneficial for the company, the need for accounting will not increase. In other words, by fostering education regarding business people's needs concerning management accounting, we propose that

training for bookkeeping and accounting should be provided together.

5. Case Study

To understand the reality of bookkeeping and accounting in Laos, the following is a description of the accounting software and financial statements used by the company we visited for a factory tour.

5.1 Company overview

The interviewee is BKN Company Limited, a member company of the Lao Chamber of Commerce and Industry, which manufactures and sells charcoal. The company was established in 2004, and is an MSE with seven factories in Laos. There are 250 employees across all seven plants. The interviewers were Boun Oum Phanthapanya (President of WPEG, Director) and Khamtanh Phousy (Secretary of WPEG, Deputy Director).

The company exports 100% of its branded product, Lao Bincho Charcoal, to Japan. Regarding its business conditions, despite having 200 tons of sales capacity per year, production capacity is at 130 tons per year and has not caught up with sales capacity. This is due to the seasonal employment of workers, and because the country manages the forest where harvesting is done, trees cannot be harvested freely.

Nevertheless, in terms of corporate management, the company achieved a surplus for the 2009 fiscal year, resolving its previous deficit, and since then, the surplus has continued. Since the company was established and is managed with the support of JICA, it should have received prior and subsequent evaluations of its investment plan. For this reason, questions were asked about the return on investment, but there was little awareness of the topic. The investment plan is the same as that drafted when the company was established, and because of the high volume of day-to-day work and the sense of security as long as there is a surplus, there is no consideration about the return on investment.

5.2 Accounting software

Although we did not see the accounting software itself, we were told that the company uses

accounting software provided by the Ministry of Finance. In addition, they accepted our request to view the financial statements that are outputs from the accounting software. We had thought that many MSEs had adopted a cash basis, and therefore expected to see a cash journal and inventory of assets. However, when the account items on the disclosed financial statements were translated from the Lao language to Japanese, the following interesting points were identified.

First, for the fixed assets that we had thought would be in an inventory of assets, the book balance and depreciation expenses were recorded. This is the case only for this company, but vehicles are depreciated over five years and equipment is depreciated over ten years. We also identified that there are accounts receivable when confirming whether credit sales are carried out. Furthermore, the response was that sales are not only cash sales but also credit sales. We also learned that balance sheets and profit and loss statements are prepared.

Second, the capital arrangement is used for balance sheets, and fixed assets, current assets, equity, fixed liabilities, and current liabilities are reported in that order. In addition, in the equity section, there were some figures that appeared to be capital and retained earnings.

Third, in terms of tax, every company has a flat rate of 24%. There is no consumption tax or value added tax.

In short, it turned out that bookkeeping is recorded on an accrual basis. Code numbers are assigned to the account items for the balance sheet and the profit and loss statement, indicating the influence of the Plan Comptable. This company does not seem to use these standard versions of a balance sheet and a profit and loss statement for management purposes. We asked about fixed asset information from the financial statements, but the president did not know, and the president's wife showed us the page. Thus, the president at least does not use the balance sheet for management purposes, and it seemed highly possible that the president's wife is single–handedly responsible for the input/output of financial data. This aspect was similar to a Japanese micro entity.

Summary

The findings of this paper are summarized here.

First, we clarified the Lao company classifications and the accounting system that applies to each classification. Large entities use IFRS, MSEs use Lao accounting standards, and micro entities use cash-basis accounting.

Second, we discussed the qualifications related to accounting in Laos. There is the LCPAA from the Ministry of Finance, the bookkeeping seminar of Lao Chamber of Commerce and Industry, bookkeeping training by the Ministry of Sports and Education in Laos, the bookkeeping course at Laos National University, and bookkeeping courses at vocational schools and audit firms, etc. We discovered that all of the training and courses are qualifications based on a final examination, and not a proficiency test like the JCCI bookkeeping certification. At the same time, we learned that all qualifications in Laos are based on final examinations, and there is no footing on which to introduce proficiency tests.

Third, according to the interviews with Lao companies, at Lao Brewery, bookkeeping and accounting are performed in a manner comparable with Japan. According to the staffing agency, the need for bookkeeping and accounting in Laos is not high. However, we learned that if a qualification is acquired, higher status can be obtained. Besides this, there was very little understanding of the current situation in Laos.

Fourth, we conducted a questionnaire survey of Lao businesspeople and obtained 82 valid responses. According to the results, many responses were indicating somewhat of an understanding of profitability by product. This is due to the influence of the Plan Comptable on the Lao accounting system, which standardized not only the preparation of financial statements but is also useful for business management. A relatively large number of respondents also stated that they use the information for break–even analysis and profit planning. However, some responses stated that while direct costs are unknown, in comparison, overhead costs were better understood, which may be due to the respondents' lack of accounting knowledge. This is a point that requires further study.

Fifth, through interviews with BKN, we were able to understand the content of the accounting software provided by the Ministry of Finance. According to the company, accrual-basis tax calculations are carried out based on the Lao accounting standard, and profit and loss statements and balance sheets are prepared from the system. We learned that fixed arrangement is used for the balance sheet, due to the influence of the Plan Comptable.

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		· • P	penuix i	Source	Data II0	in Sympo	sium unu	, icituit	.,		
Region	No.	1	2	3	4	5	6	7	8	9	10
	1	1	7	7	6	1	7	7	7	7	4
	2	1	1	1	1	1	1	1	1	1	1
	3	7	7	7	7	4	6	7	7	7	6
70	4	2	6	6	3	6	6	5	6	6	5
Symposium	5	6	7	7	6	3	6	7	7	5	6
osiur	6	2	3	6	6	2	4	4	7	7	4
п	7	4	4	7	2	2	7	4	7	7	5
	8	1	6	6	6	3	4	6	6	6	5
	9	5	3	3	4	6	6	4	5	4	4
	10	4	6	5	5	6	5	5	4	4	6
	11	1	1	1	1	3	5	3	1	1	2
	12	3	3	5	4	5	6	6	6	6	6
Vien	13	7	1	1	1	1	3	1	7	7	6
Vientiane	14	1	1	1	1	3	4	3	1	1	2
	15	1	1	1	1	3	5	2	2	1	1
	16	4	5	3	5	7	2	5	5	5	7

Appendix 1 (Source Data from Symposium and Vientiane)

		Appen		ource Da	ta nom s	availlaki		lang I I ai	Jang/		
Region	No.	1	2	3	4	5	6	7	8	9	10
	17	3	5	4	3	2	5	6	5	5	4
	18	7	5	6	6	3	5	6	6	6	6
	19	4	2	5	6	5	5	6	4	5	6
	20	1	2	1	2	2	1	2	2	1	2
	21	4	6	5		2		4	6	6	7
	22	6	5	6	6	5	6	4	4	5	6
	23	5	4	6	6	4	5	6	4	5	4
	24	3	4	3	4	5	5	4	6	3	6
	25	4	3	5	6	3	5	6	4	3	6
	26	6	5	4	5	4	5	4	6	4	5
	27	6	5	6	4	6	5	4	5	6	6
Sav	28	1	4	5	3	2	4	3	2	3	5
Savannakhet	29	6	6	6	6	5	6	6	5	5	6
khet	30	7	3	4	5	2	6	6	5	5	6
-	31	4	6	5	4	2	3	6	5	5	2
	32	5	5	6	5	6	5	6	3	4	5
	33	4	6	3	6	6	6	6	5	6	4
-	34	5	6	4	4	4	6	6	6	6	
	35	5	6	5	6	5	5	6	4	5	5
	36	3	6	7	4	6	5	3	5	6	4
-	37	7	5	7	7	4	7	6	6	6	7
-	38	5	4	6	7	4	6	5	7	6	5
	39	2	5	6	6	4	5		4	5	6
	40	4	5	6	5	4	5	4	5	6	4
	41	6	4	5	5	3	4	6	6	5	4
Lu	42	1	2	6	4	1	7	7	6	6	5
lang	43	6	1	7	5	1	6	2	3	3	7
Luang Prabang	44	5	5	5	5	5	5	5	5	5	5
ng	45	5	2	3	3	3	4	3	3	3	3

Appendix 2 (Source Data from Savannakhet and Luang Prabang)

				naix 3 (Source D	ata irom	Champas	Sur,			
Region	No.	1	2	3	4	5	6	7	8	9	10
	46		7	3	5	1	5	7			7
	47	4	3	5	4	1	7	5	5	5	4
	48	5	1	1	4		3		3	7	7
	49	5	6	7	5	6	6	7	7	6	7
	50	2	3	3	5	7	4	6	5	7	7
	51	1	5	7	2	4		4	7	2	7
	52	7	7	3	4	6	3	2	1	2	4
	53	7	7	6	1	3	6	7	7	7	6
	54	1	2	4	7	7		6	7	3	1
	55	6	6	7	2	1	4	2	4	4	5
	56	7		6	5	4	3		2	7	1
	57	6	6	5	6	3	3	5	6	6	6
	58	7	6	5	5	7	5	6	5	4	6
	59	4	5	5	6	5	7	6	7	7	7
	60	5	5	5	6	3	7	5	7	7	6
	61	3	4	6	5	3	5	4	5	4	6
	62	4	2	1	7	7	6	5	7	3	1
Champassak	63	5	6	7	5	3	5	5	6	7	6
mpas	64	2	3	2	5	4	7	5	3	2	5
sak	65	5	4	6	5	2	6	5	3	3	5
	66	3	5	4	6	7	6	6	7	6	7
	67	5	4	5	5	1	4	4	3	3	5
	68	6	6	3	5	4	6	5	7	6	6
	69	2	5	7	7	5	6	6	5	6	7
	70	2	5	6	4	2	7	4	5	4	4
	71	5	6	5	6	1	4	7	6	5	7
	72	3		4	1	7	3	7	5	1	1
	73	1	7	7	5	7	6	6	7	7	7
	74	6	5	4	5	5	5	6	6	6	6
	75	5	4	6	3	3	3	4	2	2	5
	76	2	7	7	5	1	6	5	7	5	7
	77	1	2	7	2	1	3	3	4	1	6
	78	7	7	6	5	3	7	2	2	6	1
	79	2	4	5	6	4	5	6	4	5	3
	80	1	5	2	4	1	6	4	7	4	5
	81	1	6	2	4	7	1	5	6	7	5
	82	4	7	7	7	3	7	5	7	7	7

Appendix 3 (Source Data from Champassak)