

## CORPORATE PENSION SYSTEMS AND PENSION FUNDING STATUS IN ASEAN COUNTRIES

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### ABSTRACT

*National pension systems will vary among countries because of several factors. The role of the corporate pension in sustaining and supporting a country's retirees is also different among nations. There are two main pension plans defined in International Accounting Standard No. 19: Employee Benefits, namely, defined benefit plans and defined contribution plans. The defined benefit plan requires a company to recognise its pension funding status on the balance sheet. In contrast, in a defined contribution plan, only the contribution amount to the plan is recognised as an expense on the firm's income statement. The aim of this paper is to investigate in ASEAN countries the relationship between the presence of corporate pension plans and specific financial factors in companies. The result of the empirical research shows companies with higher profitability and efficiency tend to provide corporate pension plans to their employees.*

**Keywords:** ASEAN countries, defined benefit plan, defined contribution plan, pension funding status, social security

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## **INTRODUCTION**

Corporate pension plans support the livelihood of employees after retirement. There are several elements that affect a company's pension system including the country's economic situation, the company's financial condition and results, and its relationship to public pensions. There are two corporate pensions defined in International Accounting Standard No. 19: Employee Benefits (IAS 19): defined benefit and defined contribution (International Accounting Standards Board, 2014). The defined benefit plan requires a company to manage its employees' pension assets and risks. The company's pension funding status is shown on the balance sheet. The contribution to the fund for the period is recognised as an expense on the income statement. In contrast, in a defined contribution plan, employees are responsible for managing their own pension assets; therefore, only the contributed amount to the plan is recognised as an expense on the income statement. Pension assets consist of government bonds, domestic and foreign corporate bonds, stocks, and others. Pension assets are strongly affected by economic conditions.

Corporate pension plans help support the social security in the country. Companies need to make extra payments to provide corporate pension plans to their employees. They are required to have enough funds to make a contribution to the pension fund. In addition, companies with defined benefit plans have a responsibility to manage their pension assets efficiently; otherwise, they have to make extra contributions to cover the loss on pension management.

The aim of this paper is to investigate the relationship between the presence of corporate pension plans and other financial factors in companies in ASEAN countries. The social security system and how it is conceived, economic system, economic conditions, market economy maturity, and demographics vary among ASEAN countries. Therefore, this paper first discusses pension systems in ASEAN countries to see which corporate pension plan companies tend to provide in the country, and the associated financial-statement amounts of pension funding status and pension cost. With consideration of the country's economic maturity and the role of corporate pension plans in the country's social security, the paper also examines if there are different tendencies in the relationship between the presence of a corporate pension plan and other financial factors in companies in each country.

## PENSION SYSTEMS IN ASEAN COUNTRIES

The ASEAN countries include Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic (Lao P.D.R.), Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. The corporate pension system in each country is affected by several elements, including its economic situation, its concept of social security, demographics, and the relationship between public and corporate pensions. Therefore, this section:

- i. describes GDP, population, demographics and life expectancy in each country, all of which are key factors that influence its pension system, and
- ii. explains the public and corporate pension system in each country.

The pension plans described here are mainly for employees working for private companies.

### Economic Situation and Populations of ASEAN Countries

The population in all ASEAN countries (see Figure 1) has increased consistently since 1998 (chosen for the year data for all ASEAN countries is available). Comparing populations in 2017 to those in 1998, the growth rates are around 30% to 40% in all countries other than Myanmar and Thailand. Indonesia now has the fourth largest population of all countries in the world.

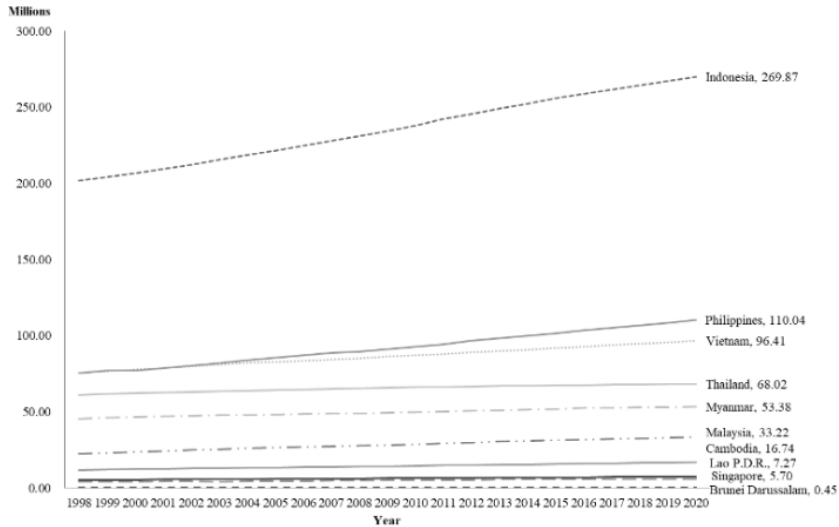


Figure 1. Population in ASEAN countries (Source: International Monetary Fund, 2019)  
 Note: The numbers after 2018 in all countries are estimated

Growth in population increases GDP, and Figure 2 shows GDP in all ASEAN countries has risen since 1998. There are three yearly periods, however, in which GDP in several countries decreased: 2001, 2009 and 2015. The Asian currency crisis in 1997, stemming from collapse in the Thai baht, caused an economic downturn that resulted in unsteady growth in subsequent years. Additionally, the recession in the U.S. in 2001 affected the economy in Singapore (Yoshino, 2007). In 2009, worldwide economic recession spread following the bankruptcy of Lehman Brothers Holdings, Inc. in 2008, having a negative effect on the economies in several ASEAN countries. As for the third period in 2015, the Chinese economy started to decelerate from 2014, and business cycle indicators and GDP growth decreased in the country around that time. China is one of the most important trading partners of ASEAN countries, thus the downturn led to declines in imports and exports with ASEAN nations (Nagauchi et al., 2015). Corresponding to the decreases in imports and exports, prices on raw commodities also declined. A fall in prices of commodities and currency depreciation are possible other factors having a negative impact on the economies in ASEAN countries (Sano et al., 2015).

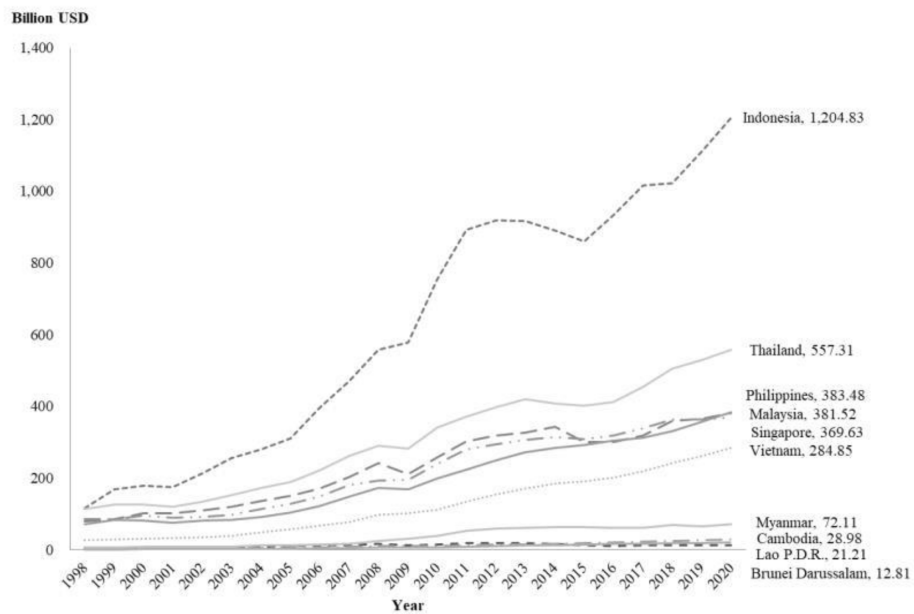


Figure 2. GDP in ASEAN countries (Source: International Monetary Fund, 2019)  
 Note: The numbers in Cambodia after 2012, Myanmar after 2015, Vietnam after 2016, Philippines after 2017, and Brunei Darussalam, Indonesia, Lao P.D.R., Malaysia, Singapore and Thailand after 2018 are estimated

Figure 3 shows the composition of the nations' population by age from 1950 to 2020. In ASEAN countries, public and/or private pensions are provided after age 55 or 60. The ratio of people above 60 to total population is increasing gradually in all countries, especially in Singapore and Thailand, where it is expected to be around 20% in 2020. Countries with aging populations will be faced with difficult issues for their pension systems due to the risks placed on pension management. In all other countries, excluding Cambodia and Lao P.D.R., the ratio will be around 10% in 2020, which will also have effects on their respective pension systems.

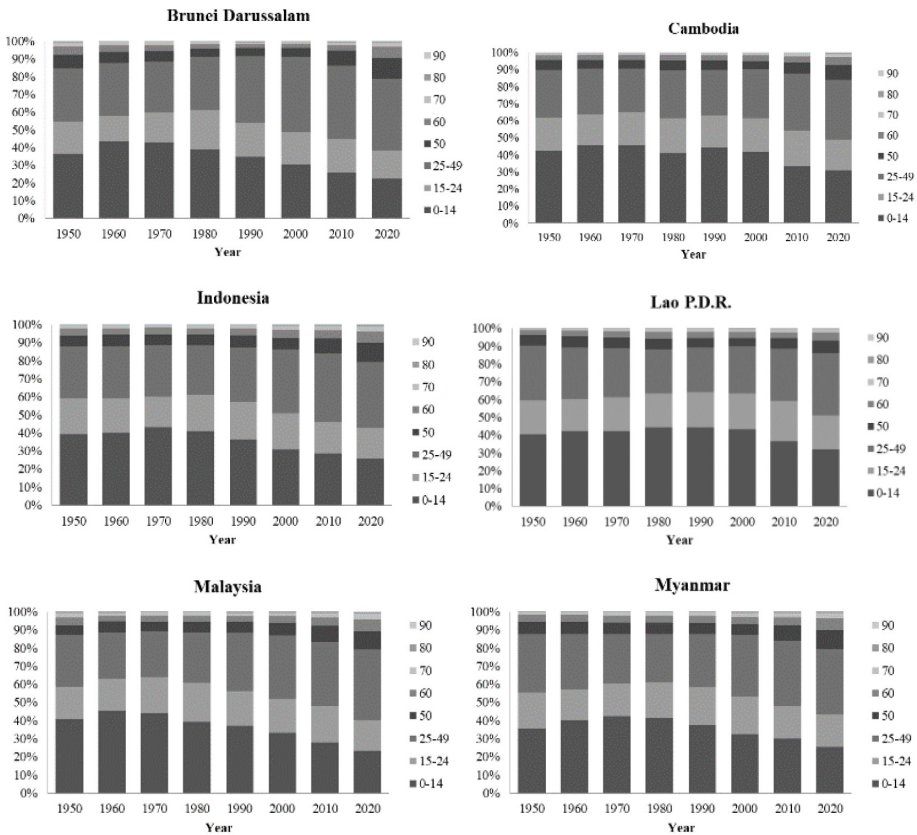


Figure 3. (continued on next page)

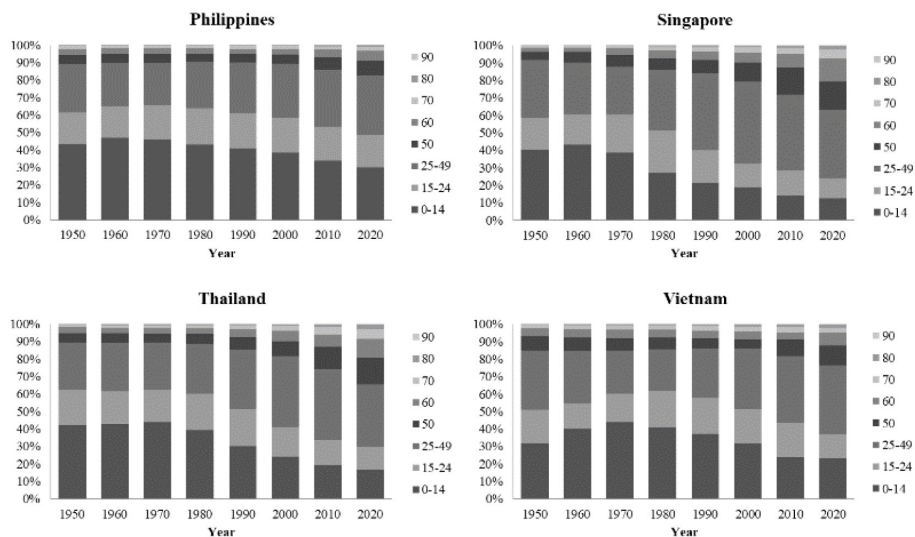


Figure 3. Population by age in ASEAN countries (Source: Department of Economic and Social Affairs of the United Nations, 2019b)

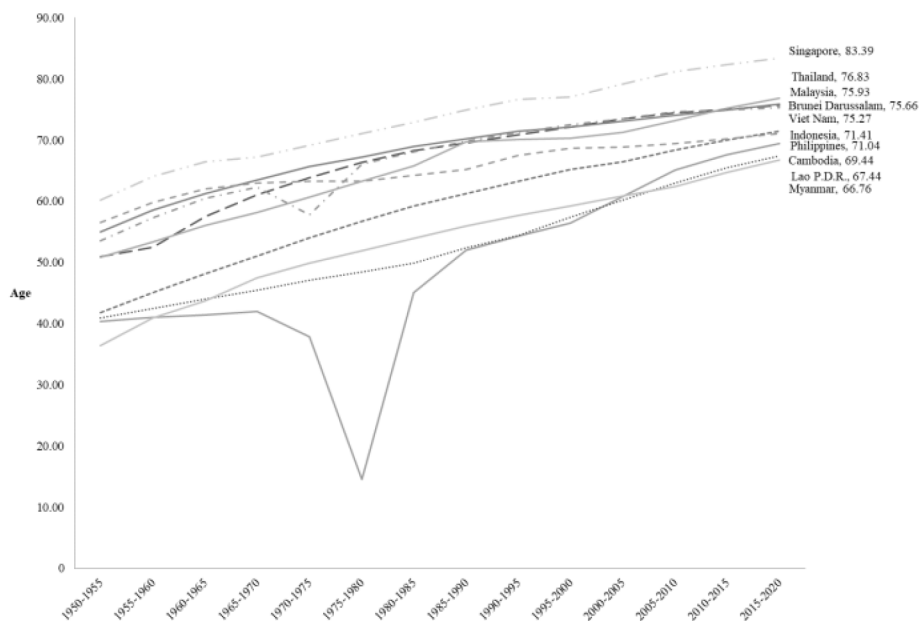


Figure 4. Life expectancy at birth in ASEAN countries (Source: Department of Economic and Social Affairs of the United Nations, 2019a)

Figure 4 shows life expectancy at birth in ASEAN countries. The trendlines of all countries in the figure are sharply upward, indicating longevity is expected to be longer year by year. Singapore and Thailand have the first and second highest life expectancies among ASEAN countries. As noted above, these countries have aging populations. Furthermore, life expectancy in these countries is longer than in other ASEAN countries. Therefore, it is assumed that the effect of pension components on financial statements in these countries would be more significant than in others.

## **Public and Private Pensions in ASEAN Countries**

### ***Brunei Darussalam***

In Brunei, all residents born in the country and have resided there for 10 years (or were born outside of Brunei and resident for 30 years) can receive 250 Brunei dollars (BND) a month in the form of old-age and disability pensions. In addition, there are two pension plans for employees working in the private sector, the employees' trust fund and supplemental contributory pension fund. All employees who are younger than 55 are required to be enrolled in the employees' trust fund. Both employees and employers contribute 5% of employees' monthly salaries to the fund, and employees receive the total amount of their contributions near or at the end of their working life. With regard to the supplemental contributory pension fund, the pensionable age is 60, and employees who paid contributions for 35 years continuously are qualified for this plan. Employees pay 3.5% of their monthly salary, and employers pay 3.5% of their payroll or BND17.50 per employee a month, whichever is greater. The pension is paid monthly based on the amount of contributions. Additional voluntary contributions are permitted for both plans (International Social Security Association, 2019).

There is no income tax or tax on consumption in Brunei. Education and medical care are free. The economy is dependent on the exports of oil and gas (Kobayashi, 2017). The ratio of oil and gas to total exports is around 90%, and energy resources represented 58% of GDP in 2018 (Department of Statistics and Department of Economic Planning and Development, Ministry of Finance and Economy, 2019).

### ***Cambodia***

Cambodia issued Royal Kram No. NS/RKM/1119/018: Law on Social Security Schemes (Royal Kram No. NS/RKM/1119/018) in November 2019 (Kingdom of Cambodia, 2019). The objective of the law is to expand the social security fund, and to offer better welfare and livelihoods for Cambodian citizens (Sochan, 2019,



5 August). The law states that employees working in the private sector can receive the same employee benefits as civil servants (Kimmarita, 2019). According to the Royal Kram No. NS/RKM/1119/018, members of the National Social Security Fund (NSSF) defined by the provisions of labour law who are at least age 60 are entitled to an old-age pension when they satisfy the following requirements: (i) have registered in the pension scheme, and (ii) have made contributions for at least 60 months to the scheme. The maximum accumulation ratio is 1.75% per a year. The pension amount is calculated based on the average wage during the contribution is made (Royal Kram No. NS/RKM/1119/018, par. 31). Before the enactment of this law, there was no pension system for employees working in the private sector (JETRO, 2018a).

### ***Indonesia***

Enacted in 2011, the Indonesian social security organising agency law, Law No. 24 of 2011: The Social Security Administrative Body (Law 24), addresses public pensions (The President of the Republic of Indonesia, 2011). The law states that all employees (except foreign workers who work in Indonesia less than six months) are required to join social security programs provided by the government, including public pensions (Law 24, par. 1). The aim of pensions provided by the government is that the covered person and their surviving spouse and children can maintain an adequate economic level of life (Ministry of Health, Labour and Welfare, 2018a). Until 2011, Law No. 3 of 1992: Employees' Social Security (Law 3) regulated old-age security, survivor and disability pensions, health protection, and workers compensation for employees working in the private sector (The President of the Republic of Indonesia, 1992a). The PT Jaminan Social Tenaga Kerja (JAMSOSTEK) which was a government-owned company provided these pensions and protections. As a part of a social security program started from 1998 in Indonesia, the social security organising agency, Badan Penyelenggara Jaminan Social (BPJS), was established in 2011 (Sugaya, 2018b). The Law 24 provides a defined contribution plan as old-age security and earnings-related social insurance to employees. The pensionable age is 57 in 2019 and increases by one year every three years until reaching a maximum of 65 years old (OECD, 2018).

As for defined contribution plans, employers pay 3.7% of the monthly salary of employees to the pension fund, and employees contribute 2%. With respect to earnings-related pension benefits, vesting is granted to employees with 15 years of contributions to the pension fund (when the participation term is under 15 years, the funding amount is provided in lump sum grants) (OECD, 2018). The benefit level is calculated by the following formula:  $0.1 \times (\text{service$



years/12)  $\times$  average salary  $\times$  inflation ratio (Sugaya, 2018b). The minimum and maximum benefit is 331,000 and 3,971,400 Indonesian rupiah (IDR) per month, respectively (Susanto, 2019). The net pension replacement rates for average earnings—which are calculated by the individual net pension entitlement divided by net pre-retirement earnings with consideration of personal income taxes and social security contributed by workers and pensioners—is 66.0% for men, and 61.6% for women (OECD, 2018).

Companies in Indonesia can provide corporate pension plans, known as Employer-sponsored Pension Fund (EPF), to their employees. This pension plan is based on Law No. 11 of 1992: Pension Funds (Law 11) issued in 1992 (The President of the Republic of Indonesia, 1992b). The employers establish the funds and provide the pension plans to their employees. Companies can choose which type of pension plan, defined benefit or defined contribution, they will provide to their employees (Sugaya, 2018b). The number of defined benefit plans in December 2019 is 158, and for defined contribution plans is 41. The number of participants in defined benefit plans in 2018 is 1,003,007; for defined contribution plans, the number is 392,300. Therefore, 71.9% of participants have defined benefit plans. However, the ratio of participants with defined benefit plans to total participants in EPF is decreasing gradually (Otoritas Jasa Keuangan, 2019).

Another pension plan under Law 11 is the Financial Institution Pension Fund (FIPF). This plan is limited to defined contribution plans. Financial institutions, including banks and life insurance companies, create the plans; employees and the self-employed join the plans voluntarily to increase their retirement savings under tax advantages (Muliati & Wiener, 2014). The number of plans in December 2019 is 25, and participants in 2018 totaled 3,239,767. The amount of pension assets is IDR159,268 billion for defined benefit plans of EPF, IDR34,972 billion for defined contribution plans of EPF, and IDR95,497 billion for FIPF (Otoritas Jasa Keuangan, 2019). The expansion of corporate pensions in conjunction with the aging of the population and economic growth is an important issue for Indonesia (Sugaya, 2018b).

Indonesian Financial Accounting Standards (Pernyataan Standar Akuntansi Keuangan: PSAK) have been converged with International Financial Reporting Standards (IFRS) since 2008 (Sugiura et al., 2017). PSAK No. 24: Employee Benefits (PSAK 24), (Institute of Indonesia Chartered Accountants, 2014) issued in 2010 is based on IAS 19 (Ernst & Young ShinNihon, 2018). Before the introduction of PSAK 24 in 2010, prior PSAK 24 issued in 2004 was also similar to IAS 19, but there were differences in recognition of actuarial gain

or loss and transitional liabilities between them (Deloitte Touche Tohmatsu, 2007).

### ***Lao People's Democratic Republic***

The public pension system in Lao P.D.R. is regulated under Ref. No. 34/NA: Law on Social Security (Ref 34) (Lao People's Democratic Republic, 2013). Employees working for companies are qualified to receive old-age benefits when they have contributed to the Social Security Fund for at least 15 years (Ref 34, par. 32). Their pension is based on accumulated pension points times the total average insurable earnings (Ref 34, par. 34), multiplied by 2% (International Social Security Association, 2019). Pension points are granted by calculating the average monthly contribution of the insured person in the preceding twelve-month period divided by the average contribution of all insured persons over the same timespan (Ref 34, par. 3). Employees who do not satisfy the conditions for receiving an old-age pension would receive the payment in a lump sum (Ref 34, par. 36). In Lao P.D.R., many employees working for private or foreign companies tend to make a short-term (one to three years) contract with their employers, and they have no employee benefits after retirement. The ratio of non-regular employees to total employees is estimated at about 70%. There are also many workers in the informal sector. No social security benefits are provided to these workers in some cases (Japan International Labour Foundation, 2019).

### ***Malaysia***

The public pension in Malaysia is a defined contribution plan under Act No. 452: Employees Provident Fund Act 1991 (The Parliament of Malaysia, 2017). Employees in the private sector are mandated to participate in the plan. Total contributions to the fund and investment returns are paid to employees in a lump sum or instalments when they are age 55 or after their retirement (Sugaya, 2018a). The benefit level is determined based on the ages and wages of employees. Employees below age 60 contribute 7% of their monthly salary to the fund, and those above 60 pay 5.5%. As for employers, they pay 13% of their employees' monthly salary if below 5,000 Malaysian Ringgit (RM), and 12% if above RM5,000, for their workers up to 60 years old. For employees above 60, the contribution rate is 6.5% of their monthly salary if below RM5,000, and 6% if above RM5,000 (Kumpulan Wang Simpanan Pekerja, n.d.). The yearly guaranteed minimum interest rate is 2.5%. The net pension replacement rate for employees with average earnings is 85.5% for men, and 78.9% for women (OECD, 2018).

The Act No. 671: Capital Markets and Service Act 2007 was issued in 2007, and the Private Retirement Scheme which encourages individuals to save for their retirement has been provided since December 2012 (The Parliament of Malaysia, 2016). The scheme is a voluntary defined contribution plan. Each individual makes a contract with a private financial institution. Employers can also contribute to the fund for their employees, receiving tax benefits (Sugaya, 2018a). Several companies establish their own trust fund and thus provide pension plans to their employees (<https://www.pensionfundsonline.co.uk/content/country-profiles/malaysia>).

In Malaysia, Malaysian Financial Reporting Standards (MFRS) are adopted for listed companies. In 2008, the Malaysian Accounting Standards Board announced the convergence of MFRS with IFRS in 2012 (International Financial Reporting Standards Foundation, n.d.). MFRS No. 119: Employee Benefits (MFRS 119), effective since 2013, is equivalent to IFRS. The prior accounting standards for employee benefits, Malaysian Accounting Standards Board Standard No. 29: Employee Benefits (MASB Standard 29) (Malaysian Accounting Standards Board, 2002) effective since 2003<sup>1</sup> and prior Financial Reporting Standard No. 119: Employee Benefits (Malaysian Accounting Standards Board, 2011) adopted from 2010 were also established following IAS 19 at the time (Rahim et al., 2011). Thus, from 2003 IAS 19 standards have been in force.

### ***Myanmar***

There are two sets of regulations related to social security, The Social Security Law, 2012 (SSL) (The Republic of the Union of Myanmar, Pyidaungsu Hluttaw, 2012) and The Social Security Rules (The Government of the Republic of the Union of Myanmar, Ministry of Labour, Employment and Social Security, 2014). The SSL sets forth the specifics of old-age pension benefits, such as pensionable age, qualifying conditions, and pension benefit amounts (SSL, pars. 34, 35). A person who has contributed to the fund for at least 180 months receives 15 times the monthly average salary earned during the period of contributions as a lump sum or in instalments (SSL, par. 35). However, the system is not yet in operation (JETRO, 2018b).

### ***Philippines***

The pension system in the Philippines has four pillars. The first is for all citizens considered poor to be provided a social assistance program (Aquino, 2002). With regard to employees working for private companies, they have three types of pension plans, representing the second to fourth pillars.

The second pillar is a mandatory public defined benefit plan based on Republic Act No. 8282 (RA8282) (Congress of the Philippines, 1997), a social security law issued in 1997, and managed by the Social Security System (SSS). All employees under age 60 are required to join the SSS (RA8282, par. 9). Vesting is granted upon 120 months of contribution to the fund (RA8282, par. 12-B). The employer contributes 7.37% of the salary of the employee, and the employee pays 3.63% (Sato, 2016). The pensionable age is 60 (RA8282, par. 12-B). The monthly pension payment is determined based on the employee's pension payment term and the monthly average salary for five years before retirement. The greatest of the amounts calculated by the following three formulas is paid as pension: (i) 300 Philippine pesos (PHP) + the average monthly salary  $\times$   $[0.2 + 0.02 \times (\text{payment term} - 10 \text{ years})]$ ; (ii) the average monthly salary  $\times$  0.4; or (iii) PHP1,000. The minimum benefit is PHP1,200 a month for a pensioner with 10 years of contributions, and PHP2,400 a month for pensioners with at least 20 years of contributions (RA8282, par. 12). The OECD (2018) shows the net pension replacement rate for both men and women with average earnings is 88.1%, highest in the East Asia/Pacific area.

The third pillar is a mandatory corporate pension plan regulated by the Republic Act No. 7641 (RA7641) (Aquino, 2002; Congress of the Philippines, 1992). Under the plan, the employer has to pay the equivalent to at least one-half month salary for every year of service for an employee who has served at least five years in the said establishment (RA7641, par. 1). The employer is allowed to treat the contribution to the employee's account in Pag-IBIG fund which is a government-owned leading housing finance institution as a substitute retirement benefit under a certain condition (Pineda, 2019).

The fourth pillar applies to all employees, but it is primarily used by large companies and some higher income classes (Sato, 2016). There are several voluntary tax-qualified and non-tax-qualified corporate pension plans as well as other retirement products offered by life insurance, pre-need companies, mutual fund, banks, and other financial institutions (Reyes, 2011).

The Philippines has adopted Philippine Financial Reporting Standards (PFRS) which is equivalent to IFRS since 2005 (Pricewaterhouse Coopers, 2019); therefore, pension components are recognised in the same way as IAS 19.

### ***Singapore***

Singapore provides a defined contribution plan, The Central Provident Fund (CPF), as a public pension under the Central Provident Fund Act (CPFA)

(Central Provident Fund Board, 2013). Singapore citizens and permanent resident workers with at least 50 Singapore dollars (SGD) monthly salary can be insured. The contribution rate is determined depending on the employee's age (OECD, 2018). For example, when the monthly wage is less than SGD750, employees who are under 55 contribute 20% of their wages to the fund, and their employers pay 17%; employees who are above 65 contribute 5% of their wages, and their employers pay 7.5% (Central Provident Fund Board, 2015). Pension payments begin at age 65. The net pension replacement rate by earnings for men with average earnings is 58.6%, and for women it is 52.2%. These are not high levels (OECD, 2018).

In addition to the CPF, in 2001 the Singapore government introduced a private voluntary pension plan, the Supplementary Retirement Scheme (SRS). Pension participants can determine the contribution amounts to their schemes up to a maximum (Kitano, 2018). Employers are allowed to contribute to the fund for their employees from 1 October 2008 (Kok et al., 2013). Several companies also provide their own corporate pension plans to their employees. These companies tend to be multinational and large companies (Kitano, 2018). There are offshore plans (offshore trusts and international pension plans) and pension plans established under Section 5 of the Income Tax Act (Section 5 Plan). They can be defined benefit or defined contribution plans. Employees and employers can make contributions to the fund of the offshore plans, whereas only employers can make contributions to a Section 5 Plan (Kok et al., 2013).

The listed companies in Singapore adopt Singapore Financial Reporting Standards, which are fully converged with IFRS. The Singapore Financial Reporting Standards have substantially adopted all IFRS since 2002 (Accounting Standards Council Singapore, 2014); therefore, pension components are recognised based on IAS 19.

### ***Thailand***

The Thai pension system provides for three types of workers. They are: (i) employees in a “formal” sector; (ii) workers in an “informal” sector (i.e., persons in irregular employment, workers in agriculture, forestry and fishery industries, or self-employed workers), and (iii) government employees. Workers who do not receive any other pension are given an old-age allowance by the government. Since this pension is the national pension plan for all those who don't have any other pension, the amount is low (Ratanabanchuen, 2019).

Employees in the formal sector, including organisations with at least one employee, are required to participate the Old Age Pension Funds (OAPF)

based on Social Security Act (B.E.2533) as a public pension (King Bhumibol Adulyadej, Rex, 1990). Workers in the informal sector can participate in the OAPF voluntarily (Sugaya, 2019). The ratio of workers in the informal sector to total employed persons is around 62% (Japan International Labour Foundation, 2018). This pension plan is a defined benefit plan (Ratanabanchuen, 2019).

For OAPF, vesting is granted to employees with 15 years of participation or above (when it is less than 15 years, the funded amount is provided to the retiring employee as a lump sum grant) (Sugaya, 2019). The pension payment starts at the age of 55 (B.E.2533, par. 77 bis). The benefit level is 20% of the average salary for the preceding five years before retirement. When the participation period is over 15 years, 1.5% is added to the 20% for each year of service. The maximum old-age pension is 7,500 Thai baht per month (Ministry of Health, Labour and Welfare, 2018b). The OECD (2018) shows the net pension replacement rate in Thailand for employees with average earnings is 39.3% for both men and women.

In 1998, the retirement benefit funding system for companies was established by the Labour Protection Act, B.E.2541. Companies are mandated to provide retirement lump-sum grants to their employees who work for at least 120 days. The minimum benefit payment is regulated in accordance with the employee's length of service. Employees working for companies that do not have a retirement age are given the right to express the intention to retire after age 60 and receive retirement lump-sum grants (unemployment compensation) at retirement (Sugaya, 2019).

The corporate pension for employees in the formal sector is Provident Voluntary Funds (PVD). The Provident Fund Act, B.E.2530 (King Bhumibol Adulyadej, Rex, 1987) was enacted in 1987 with the aim of increasing the savings of employees, and income security after their retirement. The PVDs are managed by registered fund management companies (including commercial banks, finance companies, brokerages, mutual fund companies, life insurance companies, and private placement investment fund companies (Nomura, 2008)) which the companies' fund committees designated by the employers and employees choose (Brustad, 2012). The registered fund management companies are registered by the Securities and Exchange Commission, Thailand, and monitored by it. In general, the adoption of the PVD for companies is voluntary; however, listed companies are mandated to provide it to their employees. The total asset amount of PVDs increases from 1996 to the present. Employees have an option to participate in the PVDs. They also can decide the contribution rate to the fund for their salaries, ranging from 2% to 15%. Employers are obliged to contribute

the same or more of the employees' contribution (Sugaya, 2019). The average life span in Thailand increases every year, and population aging progresses; thus, social security after retirement is an important issue. This pension plan is designed as a defined contribution pension; therefore, companies recognise the contribution to their funds as a cost in the period it is made. The funding status is not on the balance sheet.

Thai Financial Reporting Standards (TFRS) has been converged with IFRS since 2011. Currently Thai Accounting Standard No. 19: Employee Benefits is established based on IAS 19 (Federation of Accounting Professions, Thailand, 2010). Therefore, the funding status on retirement lump-sum grants for the retirement benefit funding system is disclosed on the balance sheet. Before 2011, there was no TFRS for employee benefits equivalent to IAS19 (Pricewaterhouse Coopers, 2008).

### ***Vietnam***

Under the mandatory social insurance system, Law No. 58/2014/QH13: Social Insurance (Law 58) (The National Assembly, Socialist Republic of Vietnam, 2014) states the government provides in principle a defined benefit pension to a person<sup>2</sup> who has paid their social insurance premium over 15 years. Each month, employers contribute 14% of the basic salary to the retirement and survivor allowance fund, and employees pay 8%. In principle, the pensionable age is 60 for men, and 55 for women (Law 58, pars. 54, 85, 86).

The benefit level for an employee who has reached a pensionable age and contributed social insurance premiums for at least 15 years is 45% of the average monthly salary before retirement (Law 58, pars. 54, 56). The benefit can be increased by 2% for every one-year extension of the pension payment term up to a maximum level of 75% of monthly average salary. The number of required years of contributed social insurance premiums will be increased incrementally to 20 years for men from 2018 to 2022 (Law 58, par. 56). The OECD (2018) shows that the net pension replacement rate is 81.5% for both men and women with average earnings in Vietnam. It is the fourth highest ratio for average male earners, and the second highest for females, among countries and regions in East Asia and the Pacific area, including China, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam.

Vietnam is a socialist country in principle, but the government has worked to decrease the number of government employees. Thus, the ratio of government-owned companies to the total is now relatively small. A higher



proportion of government-owned companies are large (300-plus employees) than that of the private sector. Some 94% of non-government-owned companies have fewer than 50 employees in 2015 (Fujita, 2019). Therefore, it can be assumed that not many companies provide corporate pension plans to their employees, and those that do represent a negligible part of our sample.

Vietnamese Accounting Standards (VAS) have been converged with IFRS since 2001. However, there is no accounting standard for employee benefits issued in VAS (Ernst & Young ShinNihon, 2019). Given the relative lack of corporate pension plans in Vietnam, the lack of standards is not consequential.

## **PREVIOUS RESEARCH**

The previous section revealed that corporate pension plans are provided to employees to complement public pensions, and to maintain a stable livelihood for them after retirement. The plans are a part of a benefits package in the company, therefore, providing better pension plans offer employees an incentive to work at the company for a prolonged period. On the other hand, companies are obliged to contribute money to the fund for pension assets for their employees.

Pension components have a negative effect on a company's financial statements when the pension status is unfunded. Pension cost also reduces the profit of the company. There are several prior researches discussing the relationship between pension components, i.e., pension funding status and/or pension cost, and a company's valuation. Feldstein and Seligman (1981), Landsman (1986), Barth et al. (1993), Gopalakrishnan and Sugrue (1993), Coronado and Sharpe (2003), Okumura (2005), Picconi (2006), Hann et al. (2007), Yu (2013), Kasaoka (2014), and Lode and Yusof (2015) examine if defined benefit obligations, pension assets, or defined benefit liability affects stock prices. The results in all papers conclude that investors recognise the importance of pension components, including defined benefit obligations, pension assets, or defined benefit liability when they set prices. Picconi (2006) suggests that defined benefit obligations and off-balance sheet liabilities (prior service cost, unrecognised gains and losses, and transition liability) on defined benefit plans under prior accounting standards for employee benefits are recognised by investors. Lode and Yusof (2015) select Malaysian-listed companies as samples for their empirical research in accordance with the introduction of the MFRS 119 in 2013. They find that there is a negative and significant effect of defined benefit obligations on cumulative market return, whereas pension assets are positively associated with it. There are also papers investigating the

relationship between pension funding status and corporate debt rating (Carroll & Niehaus, 1998; Cardinale, 2007).

Barth et al. (1993), Coronado and Sharpe (2003), Yu (2013), and Kasaoka (2014) also include pension cost in their models. The coefficient of pension cost in the model of Kasaoka (2014) is negatively related to stock prices, and significant. Coronado and Sharpe (2003) use a variable of pension earnings calculated by net periodic pension cost minus service cost divided by number of shares, and it is statistically significant. Barth et al. (1993) examine the effect of pension cost components including service cost, interest cost, return on pension assets, and others on stock prices from 1987 to 1990, and find that the coefficients on these pension cost components are mostly significant. However, when these pension cost components are included in the model consisting of pension components recognised both in the income statement and the balance sheet, the coefficients on pension cost components become generally insignificant. A similar tendency is found in the empirical research of Yu (2013).

To determine the effect of the efforts to reduce the impact of pension components on financial statements, several papers (Morris et al., 1983; Gopalakrishnan & Sugrue, 1995; Godwin et al., 1996; Lew, 2009; Kasaoka, 2011; Li & Klumpes, 2013; Bauman & Shaw, 2014) investigate whether companies' financial indicators—including leverage, profitability, cash flow, pension funding status, or tax status—affect the determinants of the pension assumptions used for the calculation of defined benefit obligations and pension cost.

There are several companies with corporate pension plans which freeze or terminate their pension plans to avoid payment obligations under them. There are also companies which change their defined benefit plans to defined contribution plans to reduce the risks and uncertainties on pension management. Several researches (Alderson & Chen, 1986; VanDerhei, 1987; Mitchell & Mulherin, 1989; Alderson & VanDerhei, 1992; Mittelstaedt & Regier, 1993) discuss if there is a relationship between the termination of overfunded defined benefit plans and market response, and all of them conclude that there is a positive relationship between them. Several researches examine if financially stressed companies tend to terminate or change their pension plans (Stone, 1987; Mittelstaedt, 1989; Thomas, 1989; Alderson & VanDerhei, 1992; Klumpes et al., 2009; Kasaoka, 2018). Financial factors, i.e., higher leverage, lower profitability, lower pension funding status, and others, tend to affect the termination or change in companies' pension plans.

Pension components have a significant effect on a company's financial statements and their valuations. Many companies terminate or change their pension plans to reduce the risks related to pension asset management. Companies' financial conditions and results are important factors in deciding to terminate or change their pension plans. Therefore, companies in ASEAN countries also consider these risks and uncertainties on pension plans when they decide to establish them or choose which plans to adopt. This paper examines if companies with corporate pension plans, both defined benefit and defined contribution plans, have better financial conditions and results than those without plans, and if it can also be proved to be so across borders.

## **HYPOTHESIS DEVELOPMENT AND SAMPLE SELECTION**

### **Hypothesis Development**

As noted above, there are two pension plans defined in IAS 19, defined benefit and defined contribution. Under defined benefit plans, companies recognise their pension funding status, i.e., a defined benefit liability on their balance sheet. The recognition of the defined benefit liability increases the amount of total liabilities, and it has a negative impact on the balance sheet. Figures 5 and 6 represent the effect of pension components on financial statements. The data is obtained from Osiris (2019), which is provided by the Bureau van Dijk.

Figure 5 shows the effect of defined benefit liability on total liabilities. Some 73.6% of companies increase their total liabilities by 5% or less, and 17.6% of them increase by 5% to 15%. The effect on the balance sheet is not significant for most companies.

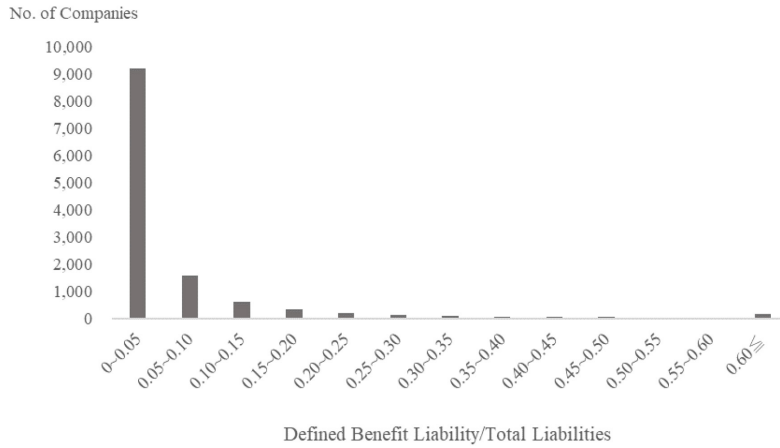


Figure 5. The effect of defined benefit liability on total liabilities

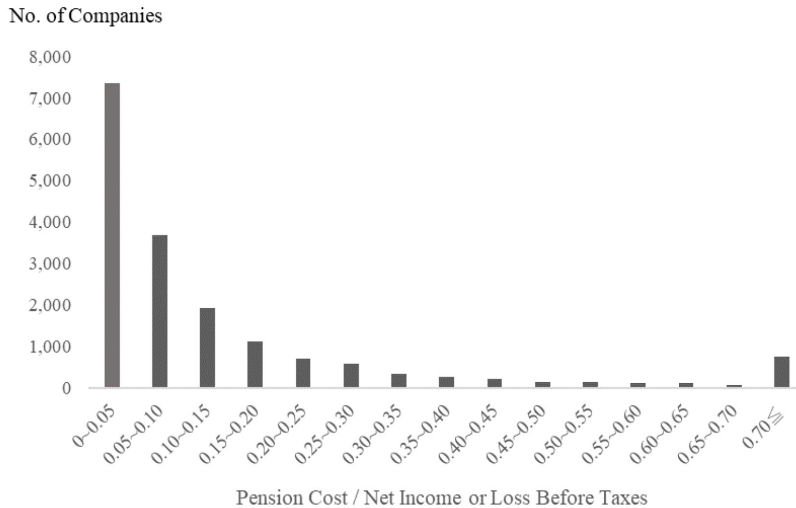


Figure 6. The effect of pension cost on net income or loss before taxes

Both defined benefit and defined contribution plans recognise pension cost in the income statement. Figure 6 represents the effect of pension cost on net income or loss before taxes. There are six companies recognising negative pension cost, and these are excluded. This pension cost impact causes some 41.7% of companies decrease their net income before taxes (or increase their net loss before taxes) by 5% or less, 20.9% by 5% to 10%, and 17.3% by 10% to

20%. The effect of pension cost on net income or loss before taxes is greater than that of pension funding status on total liabilities.

ASEAN countries are mostly developing countries. In several, publicly listed companies do not provide any corporate pension plans as explained above. Companies generally obtain tax benefits from providing pension plans to their employees. On the other hand, the companies must contribute money to the pension plans. Companies thus need to be able to access substantial funds and respond to pension management risk. Therefore, they should be well-financed and profitable. This research examines if there are different tendencies in the relationship between the presence of pension plans in companies and other financial factors in ASEAN countries.

Pension components include a defined benefit liability and pension cost, which affect the balance sheet and the income statement. Therefore, the following hypotheses are employed in this research:

- H1: Companies with better financial structure (lower leverage and higher liquidity) are more likely to provide pension plans to their employees.
- H2: Companies with higher profitability and efficiency are more likely to provide pension plans to their employees.

Companies with more assets can be well-funded or profitable if they manage their assets efficiently using economies of scale. Therefore, the following hypothesis can be employed:

- H3: Larger companies are more likely to provide pension plans to their employees.

To examine these hypotheses, Wilcoxon rank sum test and logistic regression model are employed. Variables treated in these models are debt to asset ratio, current ratio, and retained earnings for a company's financial condition, and return on equity and asset turnover for a company's financial results. The formula of logistic regression model is as follows:

$$PD_t = \beta_0 + \beta_1 DAR_t + \beta_2 CR_t + \beta_3 RE_t + \beta_4 ROE_t + \beta_5 ASTU_t + \beta_6 SIZE_t + Year Dummy + Country Dummy + \varepsilon$$

The dependent variable, PD represents the presence of pension plans in a company. If a company discloses pension components, i.e., defined benefit

liability and/or pension cost, on their financial statements, the value is 1, otherwise it is 0. The DAR is the debt to asset ratio, which shows a company's leverage. When a company provides a defined benefit plan to the employees, it has to recognise a defined benefit liability, increasing the amount of total liabilities. Thus, the pension plan has a negative impact on leverage. A company's financial structure is an important factor in providing defined benefit plans. The current ratio (CR) shows a company's liquidity, i.e., its ability to pay a short-term obligation. Retained earnings (RE) is the amount of accumulated income recognised in net assets. RE is one method of financing and can be used for business activities. Companies with adequate retained earnings are more likely to operate their businesses effectively and make profits and raise capital with reduced risk.

Return on equity (ROE) is net income before taxes divided by net assets. It is one of the most important financial indicators to measure a company's profitability. As noted, both defined benefit and defined contribution plans require firms to recognise pension cost for the period. Companies with pension plans need to generate higher profits to fund the pension fund. The asset turnover ratio (ASTU) measures how efficiently a company uses assets and generates revenues. Company size (SIZE) is the natural logarithm of total assets. It is assumed that companies with pension plans have enough funding and profit to recognise defined benefit liability and pension cost. Larger companies have more employees, and have a social responsibility to consider the social security of their employees.

### **Sample Selection**

The following empirical research is based on data from company annual reports for the 15-year span from fiscal 2004 to 2018. The initial year of 2004 is when the number of companies recognising pension components, and adopting IFRS or not fully compliant IFRS, started to increase; the final year of 2018 is the latest year data is available. Table 1 shows the number of companies treated in this empirical analysis. Financial data collected for this analysis is obtained from Osiris (2019).

Table 1  
*Sample companies*

Publicly listed corporate companies in ASEAN (excluding financial institutions and insurance companies)	45,683
Companies with other than 12-month accounting period	630
Data missing	421
Total	44,632

The table represents a sample of 45,638 publicly listed companies in ASEAN countries, excluding banks and insurance firms. Some 630 companies with accounting periods other than 12 months are excluded. There are 421 companies with missing data. The total number of companies available for this analysis is thus 44,632.

Table 2 shows the number of companies disclosing pension components on their financial statements. In Indonesia, about 60.6% of companies provide either defined benefit or defined contribution plans and recognise pension components. Companies disclosing only pension cost provide defined contribution plans to their employees. Some 15.8% of companies disclose only pension cost, i.e., those providing only defined contribution plans to their employees. No companies recognise pension components in Lao P.D.R. As for Malaysia and Singapore, most companies provide defined benefit or defined contribution plans. In our data, some 78.3% of companies for Malaysia and 85.9% of Singapore companies disclosing pension components have only defined contribution plans. On the other hand, in Philippines and Thailand, most companies recognise pension funding status on the balance sheet, which means they have defined benefit plans.

Table 2  
*The number of companies disclosing pension components by country*

Country	Disclosing pension components	Disclosing only pension cost	Not disclosing pension components	Total
Indonesia	3,333	526	2,171	5,504
Lao P.D.R.	0	0	8	8
Malaysia	8,626	6,753	2,528	11,154
Philippines	2,165	260	652	2,817
Singapore	6,138	5,273	1,658	7,796

*(continued on next page)*



Table 2: (continued)

Country	Disclosing pension components	Disclosing only pension cost	Not disclosing pension components	Total
Thailand	4,884	6	3,598	8,482
Vietnam	111	0	8,760	8,871
Total	25,257	12,818	19,375	44,632

In Vietnam, 99.7% of companies do not provide any pension plan to their employees. Some 111 companies recognise pension components for 2005 to 2007 before the voluntary social insurance specified in Law No. 71/2006/QH11: Law on Social Insurance (Law No. 71/2006/QH11) (The National Assembly, Socialist Republic of Vietnam, 2006) was implemented on 1 January 2008 (Law No. 71/2006/QH11, par. 140). There is no data for publicly listed companies of Brunei Darussalam, Cambodia and Myanmar.

Table 3  
*Accounting standards that company adopt*

Accounting standards	No. of companies
IFRS	732
Not fully compliant IFRS	22,039
Local GAAP	21,730
U.S. GAAP	14
No information	117
Total	44,632

Table 3 shows that the number of companies adopting IFRS, not fully compliant IFRS, local GAAP, U.S. GAAP, or no information available. Some 84.8% of companies adopting IFRS are in Singapore, 10.2% are in Thailand. With regard to companies adopting not fully compliant IFRS, 41.8% of these companies are in Malaysia, 31.0% in Singapore, 15.3% in Thailand, 11.9% in Philippines, and the rest in Lao P.D.R. The number of companies adopting IFRS and not fully compliant IFRS started to increase gradually from 2005 or 2006 in Malaysia, Philippines and Singapore. In our sample of companies adopting local GAAP, Vietnam represents 40.8% of companies, 25.3% in Indonesia, 22.9% in Thailand, and 8.7% in Malaysia. The rest are in Singapore, Philippines and Lao P.D.R. Some 99% of companies in Indonesia and Vietnam adopt local GAAP. However, Indonesia has converged their national accounting standards with IFRS, since the announcement of the convergence project with International

Accounting Standards Board in 2008, and Indonesian accounting standards are currently broadly equivalent to IFRS (Ernst & Young ShinNihon, 2018). Some 12 companies adopting U.S. GAAP are in Singapore, and two are in Vietnam.

## ANALYSIS RESULTS

Table 4 shows descriptive statistics of variables treated in this empirical research. All variables are calculated with consideration of pension component effects on each financial indicator.

Table 4  
*Descriptive statistics*

	Average	SD	25th percentile	Median	75th percentile
PD	0.573	0.495	0.000	1.000	1.000
DAR	0.468	0.432	0.267	0.445	0.612
CR	2.967	5.887	1.074	1.647	2.820
RE	0.003	0.925	0.013	0.106	0.247
ROE	0.055	0.637	0.026	0.106	0.197
ASTU	0.914	1.079	0.349	0.723	1.171
SIZE	4.872	0.776	4.351	4.812	5.138

*Notes:* PD = Pension Components Disclosure, DAR = Debt to Asset Ratio ( $[\text{total liabilities}_t - \text{defined benefit liability}_t] / [\text{total assets}_t - \text{defined benefit asset}_t]$ ), CR = Current Ratio (current assets/current liabilities), RE = Retained Earnings ( $\text{retained earnings}_t / (\text{total assets}_t - \text{defined benefit asset}_t)$ ), ROE = Return on Equity ( $(\text{net income before taxes}_t + \text{pension cost}_t) / \text{net assets}_t$ ), ASTU = Asset Turnover ( $\text{sales}_t / (\text{total assets}_t - \text{defined benefit asset}_t)$ ), Size = Firm Size (natural logarithm of total assets)

Table 5 represents the correlations between disclosure of pension components and other financial indicators. There is no strong relationship in any of these variables. Only the correlation between DAR and RE is relatively high at  $-0.554$ , which indicates that when a company has a higher debt to asset ratio, it has lower retained earnings. Retained earnings is a component element of net assets; when total liabilities are high, net assets become low. Therefore, this correlation can be relatively high. However, there is no multicollinearity in the correlation.

Table 5  
Correlations

	PD	DAR	CR	RE	ROE	ASTU	SIZE
PD	1.000						
DAR	-0.072	1.000					
CR	0.010	-0.231	1.000				
RE	0.040	-0.554	0.038	1.000			
ROE	-0.015	-0.077	0.015	0.181	1.000		
ASTU	-0.081	0.072	-0.087	-0.007	0.028	1.000	
SIZE	0.304	0.014	-0.116	0.204	0.063	-0.189	1.000

Table 6 shows the result of the Wilcoxon rank sum test in ASEAN countries for the relationship between pension components disclosure and companies' financial conditions and results. Companies with a better financial structure, including leverage and liquidity, tend to have pension plans. With regard to company size, larger firms tend to disclose pension components on their financial statements. As for the variable of ROE, companies providing pension plans to their employees have lower ROE and asset turnover. In this analysis, the country-specific impact is not considered.

Table 7 represents the result of Wilcoxon rank sum test with the data categorised by country. Lao P.D.R. is excluded, because there are only eight companies and all of them do not disclose pension components. The result shows different tendencies from Table 6.

Companies disclosing pension components in Indonesia, Philippines and Thailand have lower median DAR than those not disclosing pension components; those in Malaysia, Singapore and Vietnam have higher DAR. In Indonesia, Philippines and Thailand, companies tend to provide defined benefit plans to their employees. On the other hand, in Malaysia and Singapore, about 80% of companies having pension plans adopt defined contribution plans. Under defined contribution plans, pension cost is recognised on the income statement and does not affect the company's balance sheet. The company's financial structure can be less important for companies in these countries. Only 1% of companies provide pension plans in Vietnam. Indonesia and Vietnam have relatively higher DARs than other countries. This result indicates that companies in these countries tend to have debt financing.

Table 6  
*The relationship between pension components disclosure and companies' financial conditions and results in ASEAN countries*

	Companies disclosing pension components		Companies not disclosing pension components		Wilcoxon rank sum test
	Median	SD	Median	SD	<i>p</i> -value
DAR	0.420	0.381	0.483	0.491	0.000***
CR	1.762	5.656	1.506	6.184	0.000***
RE	0.156	0.910	0.063	0.944	0.000***
ROE	0.100	0.622	0.117	0.658	0.000***
ASTU	0.689	1.020	0.786	1.146	0.000***
SIZE	4.999	0.735	4.549	0.744	0.000***

Note: \*\*\*, \*\*, \* and † indicate statistical significance at 0.1%, 1%, 5% and 10% levels, respectively

With regard to CR, it is expected that the ratio of companies disclosing pension components is higher than those not disclosing. Only the median ratios for companies disclosing pension components in Indonesia and Thailand are higher and significant. The ratios in other countries are insignificant. In addition, in Malaysia, Singapore, and Vietnam, the median ratios of companies disclosing pension components are lower. The current ratio represents the ability to pay a short-time obligation. Pensions, on the other hand, are established under a long-term perspective looking forward to employees' retirement. Therefore, liquidity might not be considered when companies decide to provide pension plans to their employees.

Table 7  
*The relationship between pension components disclosure and companies' financial conditions and results by country*

Country		DAR	CR	RE	ROE	ASTU	SIZE	
Indonesia	CDPC	Median	0.479	1.489	0.118	0.098	0.696	5.177
		SD	0.580	5.716	1.040	0.580	1.942	0.742
	CNDPC	Median	0.526	1.409	0.080	0.101	0.727	5.093
		SD	0.455	7.038	1.335	0.826	1.134	0.777
	WRST	<i>p</i> -value	0.000***	0.002**	0.000***	0.228	0.416	0.000***

(continued on next page)

Table 7: (continued)

Country			DAR	CR	RE	ROE	ASTU	SIZE
Malaysia	CDPC	Median	0.378	1.997	0.179	0.089	0.640	4.745
		SD	0.292	6.127	0.577	0.365	0.571	0.692
	CNDPC	Median	0.360	2.000	0.128	0.081	0.618	4.661
		SD	0.241	6.426	0.625	0.347	0.530	0.650
	WRST	<i>p</i> -value	0.001**	0.873	0.000***	0.198	0.002*	0.000***
	Philippines	CDPC	Median	0.440	1.669	0.153	0.112	0.360
SD			0.484	9.564	1.477	0.617	0.514	0.880
CNDPC		Median	0.453	1.507	0.040	0.065	0.156	4.652
		SD	1.226	13.449	2.783	0.568	0.504	1.018
WRST		<i>p</i> -value	0.733	0.118	0.000***	0.000***	0.000***	0.000***
Singapore		CDPC	Median	0.449	1.763	0.160	0.100	0.766
	SD		0.284	3.813	1.150	0.871	0.911	0.748
	CNDPC	Median	0.418	1.848	0.154	0.086	0.605	4.970
		SD	0.401	5.254	1.575	1.214	0.778	0.736
	WRST	<i>p</i> -value	0.001**	0.884	0.327	0.001**	0.000***	0.909
	Thailand	CDPC	Median	0.425	1.589	0.137	0.112	0.818
SD			0.399	4.112	0.603	0.654	1.000	0.698
CNDPC		Median	0.464	1.396	0.105	0.110	0.882	4.678
		SD	0.664	7.318	0.857	0.596	0.905	0.706
WRST		<i>p</i> -value	0.000***	0.000***	0.000***	0.051†	0.004**	0.000***
Vietnam		CDPC	Median	0.568	1.402	0.046	0.205	1.114
	SD		0.222	3.346	0.050	0.108	1.115	0.566
	CNDPC	Median	0.539	1.440	0.045	0.141	0.906	4.296
		SD	0.389	4.591	0.412	0.572	1.378	0.645
	WRST	<i>p</i> -value	0.404	0.898	0.654	0.000***	0.019*	0.124

Note: CDPC = Companies disclosing pension components; CNDPC = Companies not disclosing pension components; WRST = Wilcoxon rank sum test; \*\*\*, \*\*, \* and † indicate statistical significance at 0.1%, 1%, 5% and 10% levels, respectively

As a group, companies disclosing pension components have higher RE than those not disclosing. The median proportion in Singapore and Vietnam, however, is insignificant. In all countries except Indonesia, companies disclosing pension components have higher ROE than those not disclosing. The median proportion of Indonesia is insignificant. Vietnam has a relatively higher ROE than other countries. As explained above, the proportion of debt to assets tends to be higher in Vietnam. Therefore, net assets can be smaller. With regard to ASTU, companies disclosing pension components in Malaysia, Philippines, Singapore, and Vietnam have higher median ratios than those not disclosing and these ratios are significant. As for SIZE, companies having pension plans are larger than those without plans in all countries except Singapore and Vietnam. Companies need to have adequate funding ability to provide pension plans for their employees. In Vietnam, only 1% of companies disclose pension components; therefore, the variables except ROE and asset turnover are insignificant.

Table 8

*The effect of companies' financial conditions and results on pension components disclosure (N = 44,632)*

Variables	Expected signs	Coefficient	p-value
Intercept		-5.958	0.000***
DAR	-	0.038	0.677
CR	+	-0.009	0.000***
RE	+	0.097	0.000***
ROE	+	0.038	0.072†
ASTU	+	0.172	0.000***
SIZE	+	0.323	0.000***
Adjusted R <sup>2</sup>		0.412	

Note: \*\*\*, \*\*, \* and † indicate statistical significance at 0.1%, 1%, 5% and 10% levels, respectively

Table 8 shows the result of a logistic regression model to examine the effect of companies' financial conditions and results on pension components disclosure. The variables of DAR and CR have opposite signs from those expected. As explained in Figure 7, companies disclosing pension components in Malaysia, Singapore and Vietnam have higher DAR, and companies in these countries tend to have defined contribution plans or provide no pension plans. For CR, in Malaysia, Singapore and Vietnam, companies disclosing pension components have lower medians than those not disclosing.

All indicators representing financial results, ROE and ASTU have a positive effect on pension component disclosure and are significant. Firm size also affects the presence of pension plans at companies. As shown in the previous section, the recognition of pension cost has a greater negative impact on the income statement than that of defined benefit liability on the balance sheet. Some 50.8% of sample companies recognising pension components disclose only pension cost on their financial statements. Therefore, companies with higher profitability and efficiency tend to provide pension plans to their employees. All year dummies are significant. All country dummies except Lao P.D.R. are also significant. The country dummy of Lao P.D.R. is insignificant because the country has only eight companies and all companies do not disclose pension components.

## **SUMMARY AND CONCLUSIONS**

Corporate pension plans have a social role to play in both complementing public pensions and supporting financial stability for their employees after retirement. Pension systems vary among countries. Countries with defined benefit plans for public pensions are Indonesia (net pension replacement rate for employees with average earnings is 61.6% to 66.0%), Philippines (88.1%), Thailand (39.3%) and Vietnam (81.5%). The role of corporate pension plans can be considered significant in Thailand—where 99.9% of companies with pension plans recognise both defined benefit liability and pension cost on their financial statements—due to the low net pension replacement rate. Countries with defined contribution plans for public pensions and their net pension replacement rates are Malaysia (78.9% to 85.5%) and Singapore (52.2% to 58.6%).

In most ASEAN countries, GDP and populations increase every year. An aging population will become an issue for Singapore and Thailand in the foreseeable future. It is important for these countries to consider the future form of their current pension plan systems.

Companies gain tax benefits from providing their own pension plans. But they also assume the burden of funding those plans, as well incur risks from pension asset management. Therefore, companies need to have a strong financial structure and adequate profits to provide pension plans to their employees. This paper examined if companies with lower leverage, and higher liquidity, profitability, and efficiency tend to provide corporate pension plans to their employees across all the ASEAN countries. The ratio of pension cost to net income or loss before taxes ranges from 0% to 25%; that of defined benefit



liability to total liabilities is likely to be less than 10% in most companies. The result of Wilcoxon rank sum test showed that companies with better financial conditions and larger size tend to provide corporate pension plans to their employees.

However, when the data was categorised by country, the result showed different tendencies. The leverage in companies disclosing pension components in Indonesia, Philippines and Thailand had a lower median than those not disclosing, whereas in Malaysia and Singapore, it was higher. Some 78.3% of companies disclosing pension components in Malaysia, and 85.9% in Singapore, adopt defined contribution plans which only affect the income statement. Therefore, the company's financial structure was less important in these countries. Companies disclosing pension components tended to have higher profitability and efficiency than those not disclosing in most countries.

To increase the robustness of the results of Wilcoxon rank sum test, a logistic regression model was employed. The result shows that companies with higher profitability and efficiency had corporate pension plans. The variable of RE for companies disclosing pension components is higher than for those not disclosing and significant in both results of Wilcoxon rank sum test and a logistic regression model. The ratio of pension cost to net income or loss before taxes is higher than that of defined benefit liability to total liabilities; half of the sampled companies recognising pension components disclose only pension cost on their financial statements. The result of Wilcoxon rank sum test by country also showed that leverage and liquidity for companies disclosing pension components in Malaysia and Singapore were worse than those for companies not disclosing. As noted above, these countries tend to provide defined contribution plans. Therefore, these companies might place greater value on their profitability and efficiency.

## **ACKNOWLEDGEMENTS**

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## **NOTES**

1. MASB Standard 29 states that the standard is compliant with IAS 19 (MASB Standard 29, Appendix 1).

2. The “person” includes Vietnamese citizens working under indefinite or definite-term labour contracts, seasonal labour contracts, or contracts for given jobs with a term of between full three months and under 12 months, or between a full one month and under three months (Law 58, par. 2).

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